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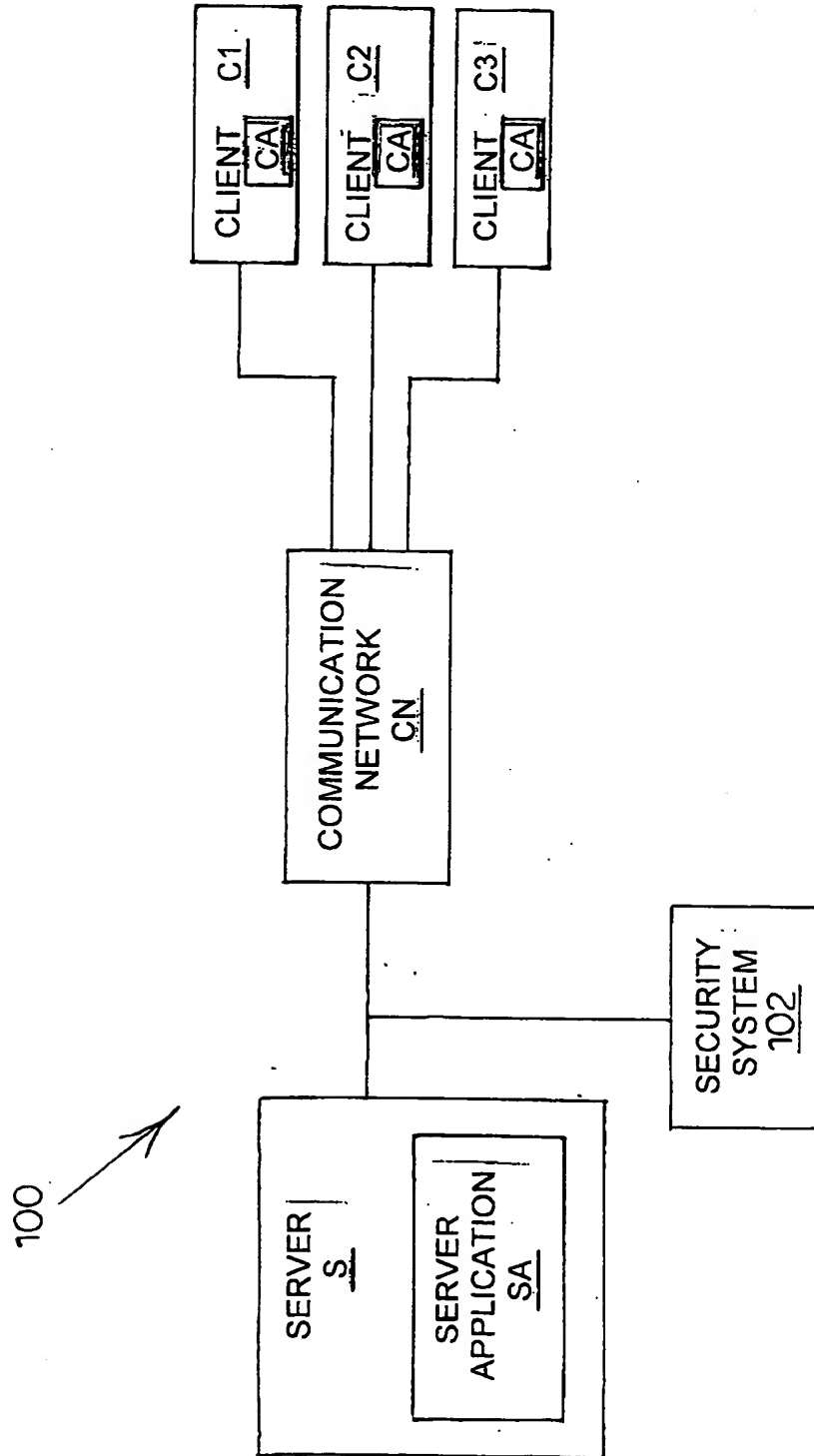


Fig. 1A

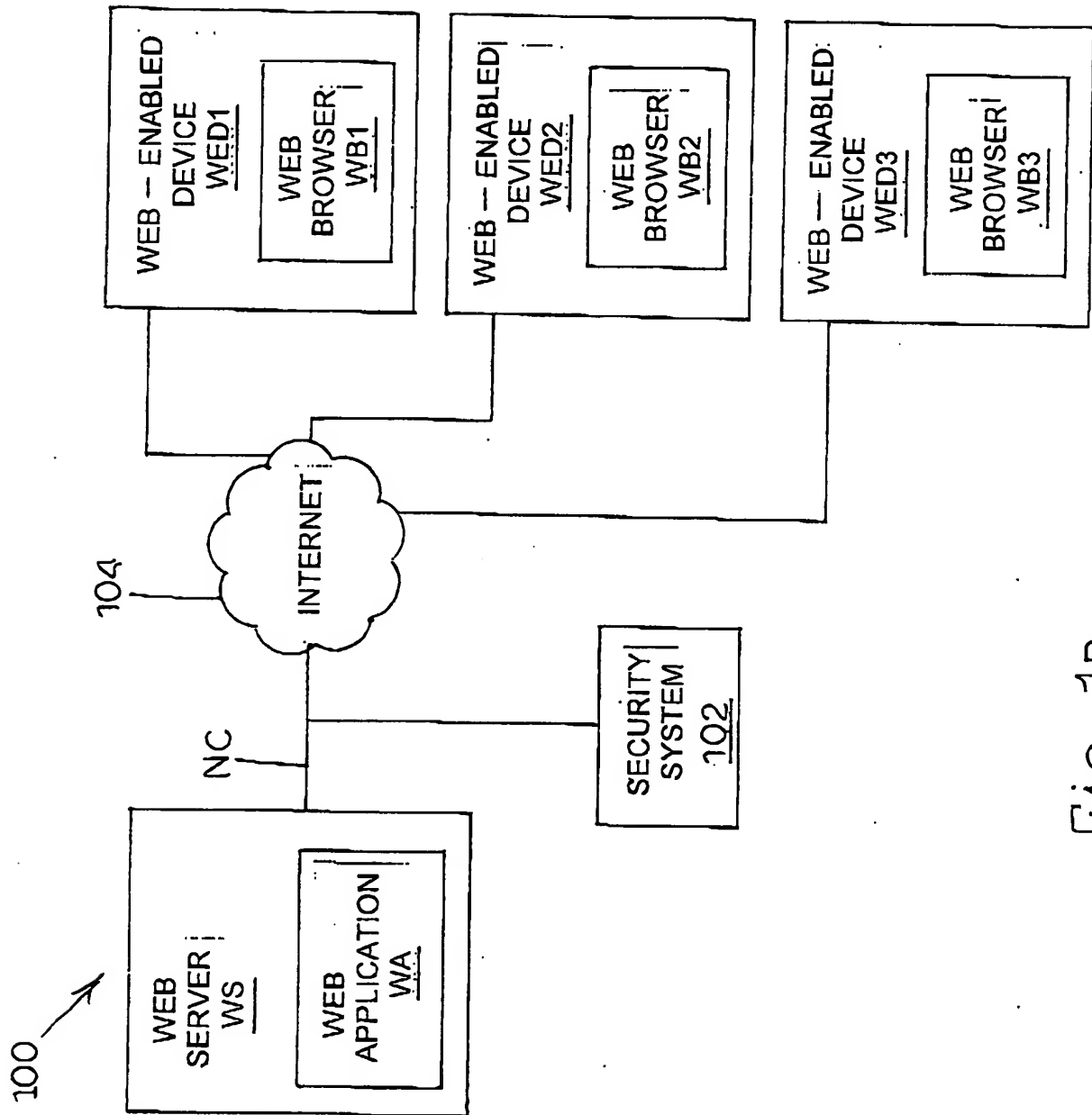


Fig. 1B

FIG. 2

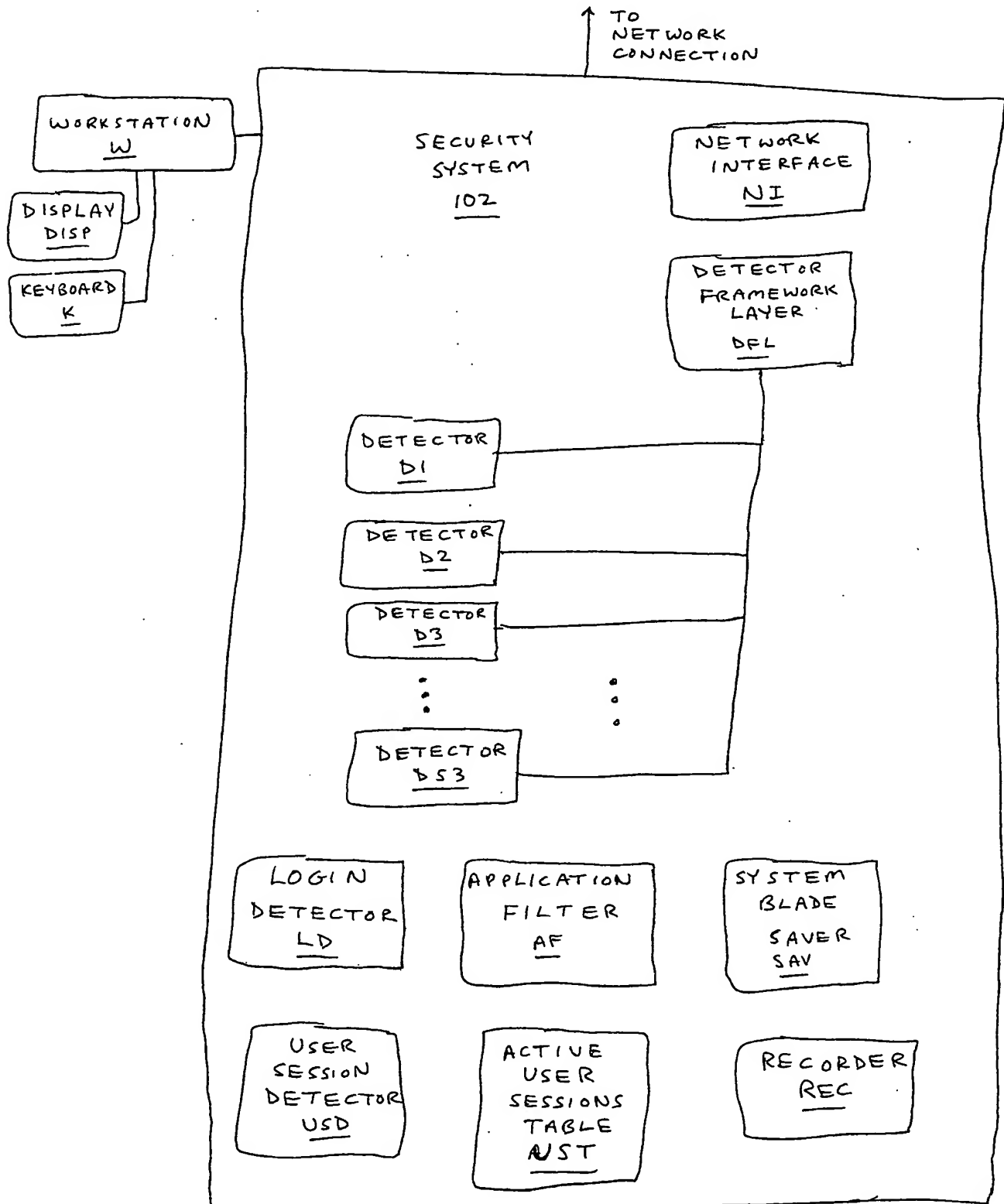


FIG. 3

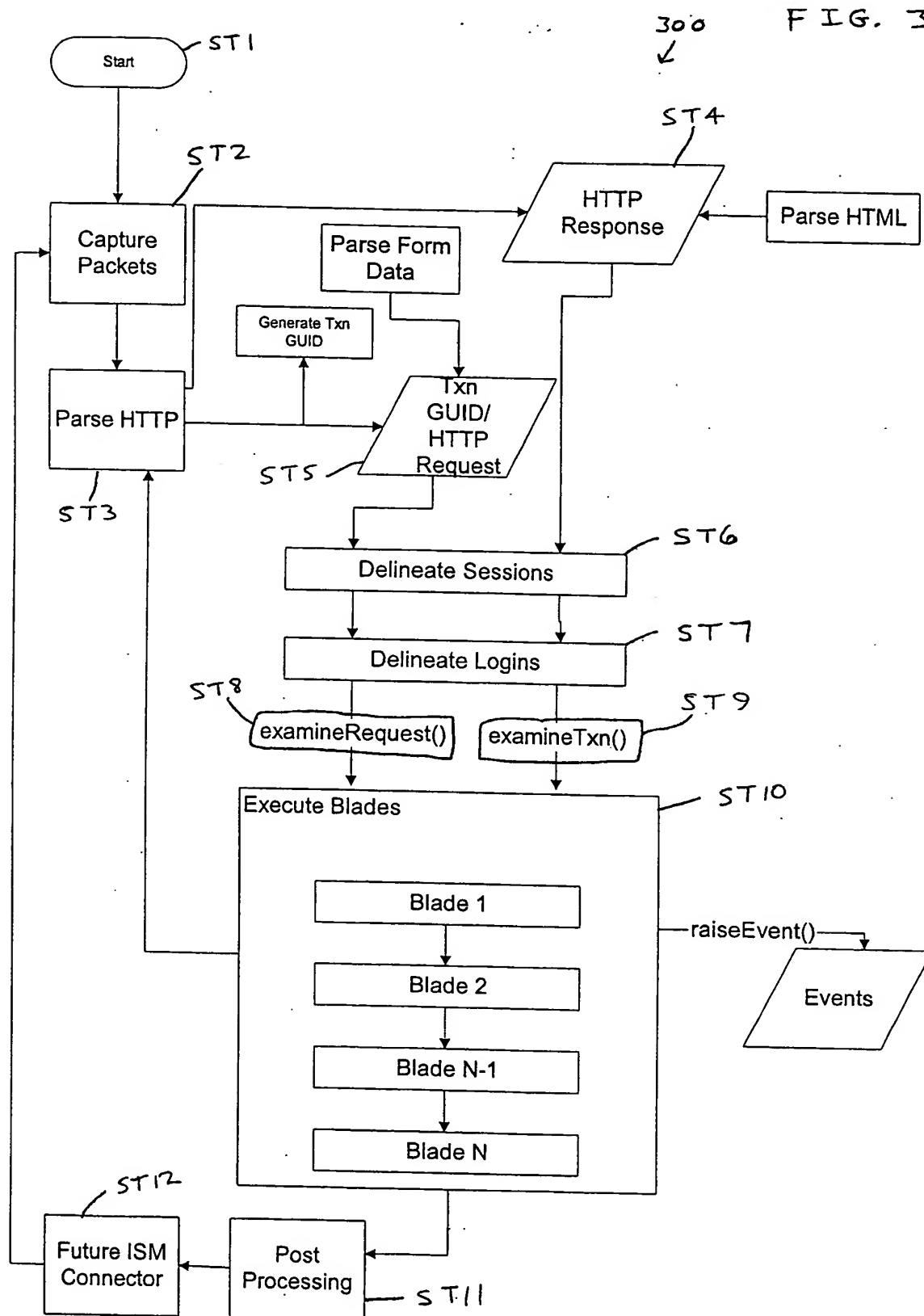


FIG. 4

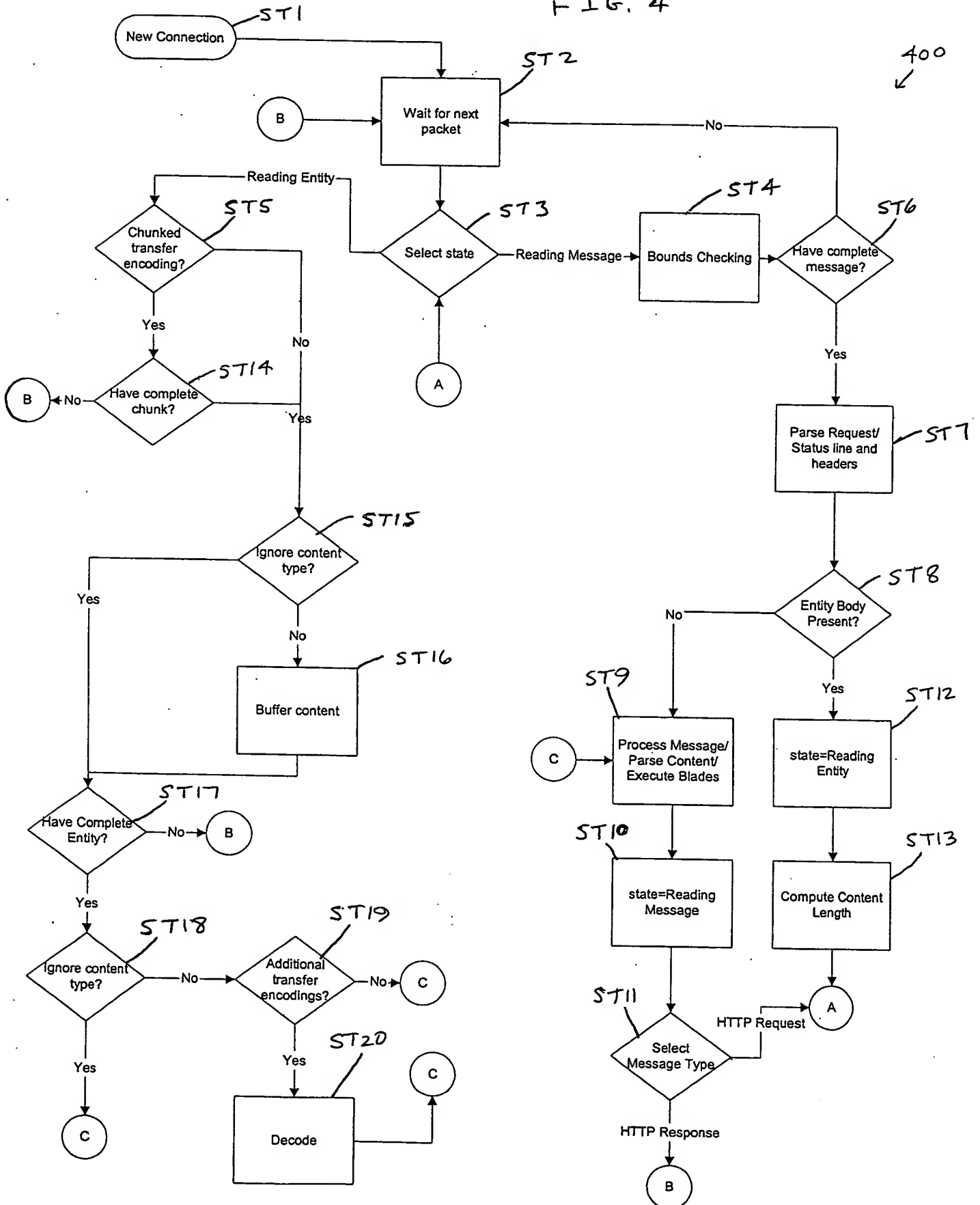
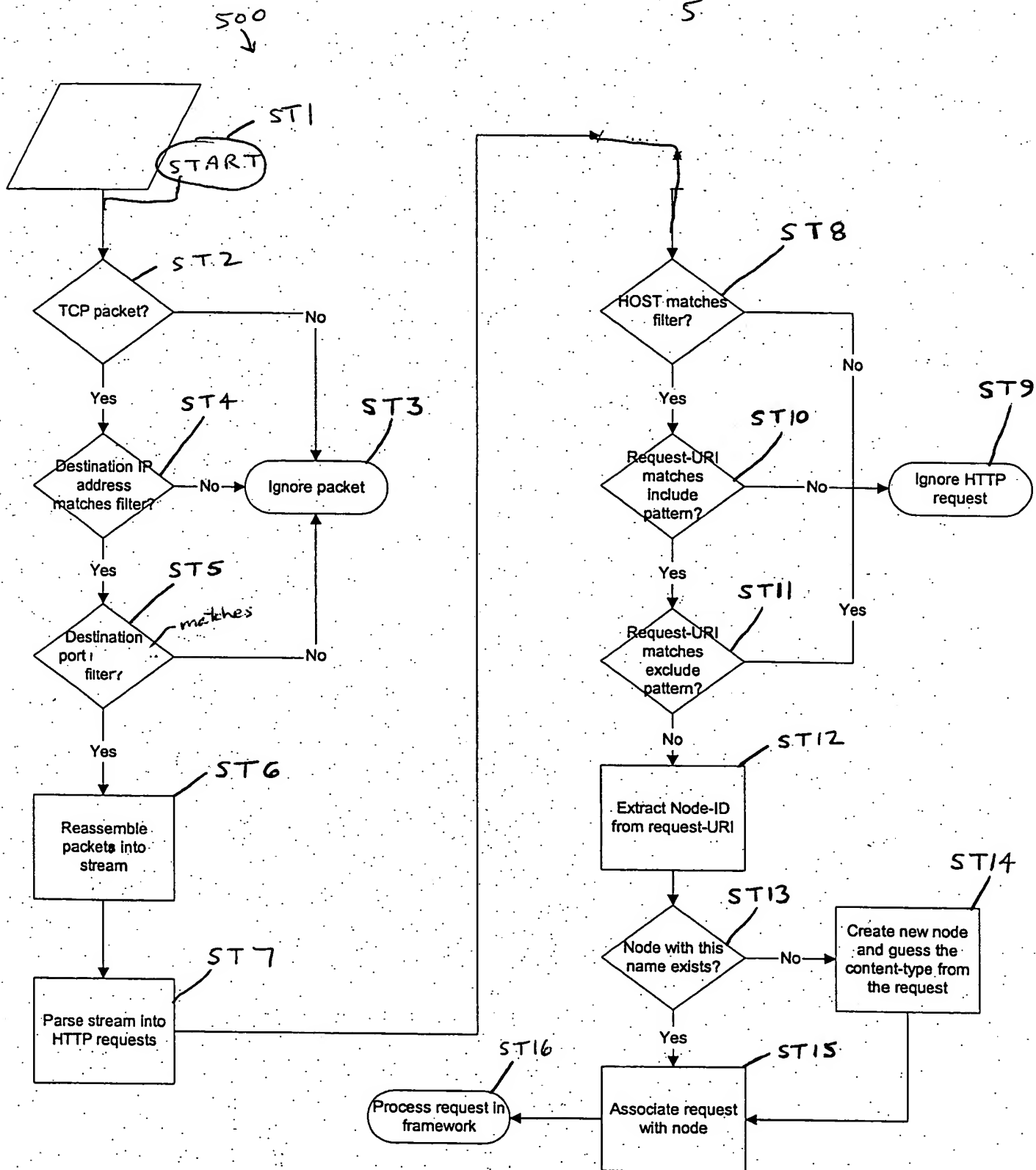
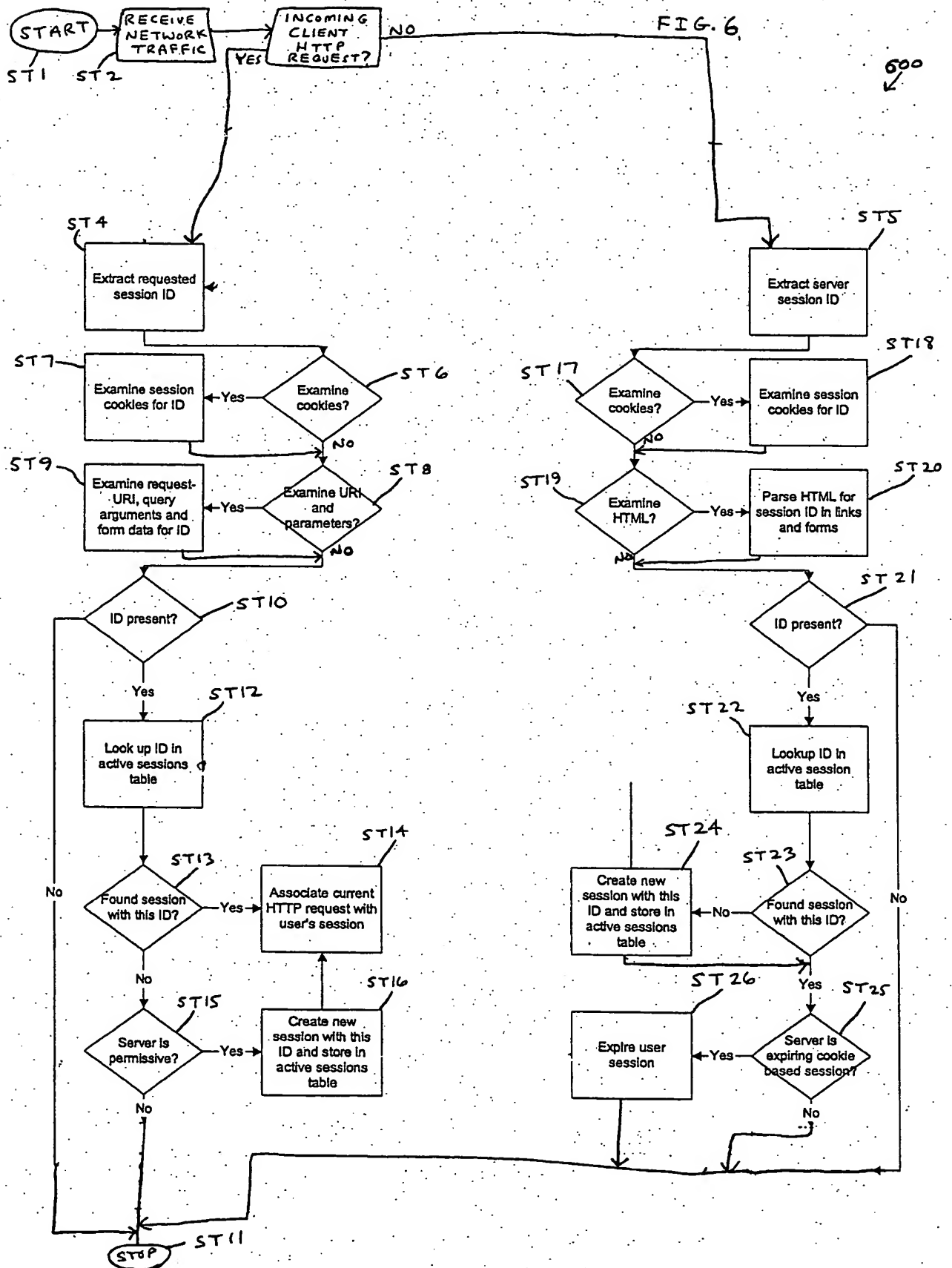


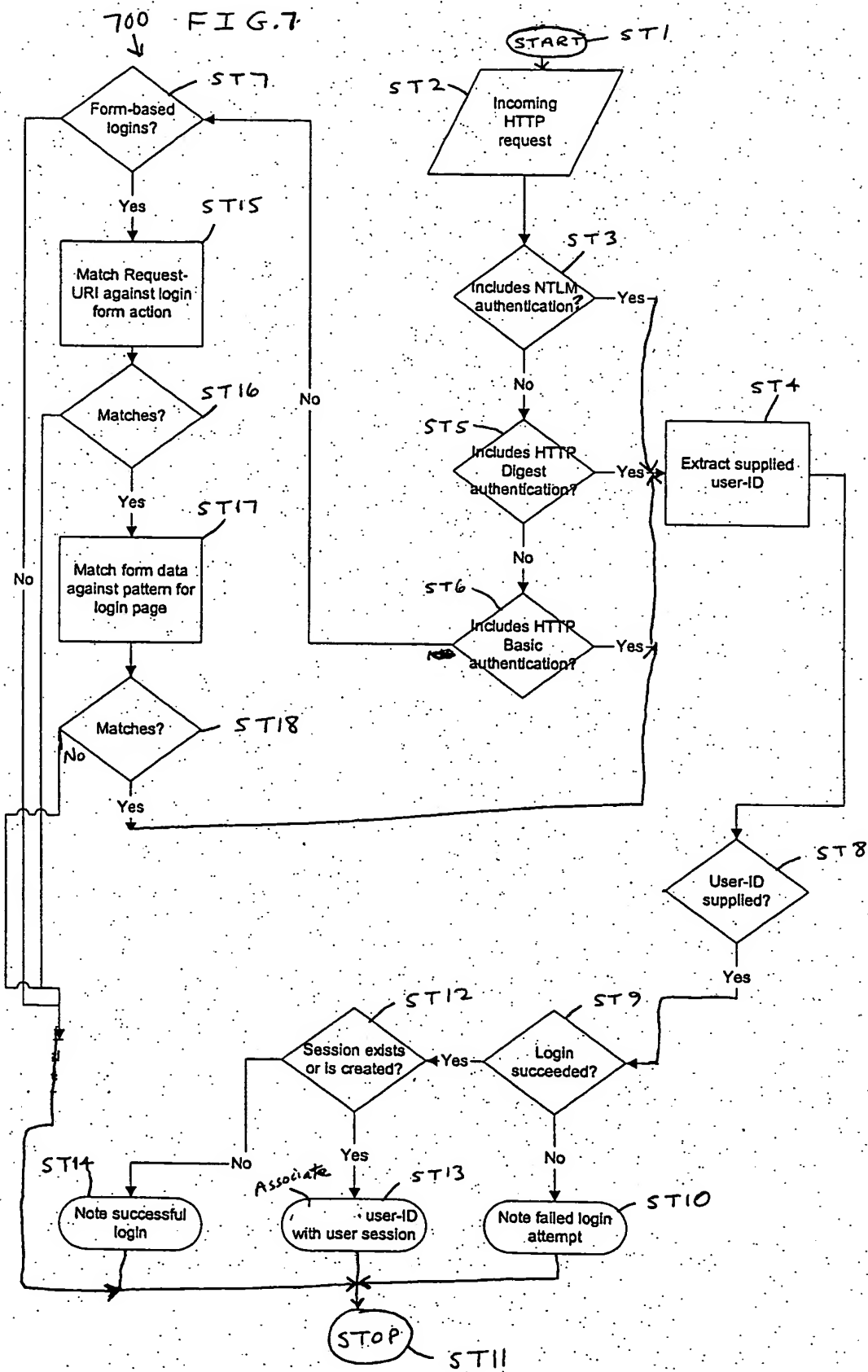
FIG.
5



Title: METHODS, SYSTEMS AND COMPUTER
PROGRAM PRODUCTS FOR
MONITORING PROTOCOL RESPONSES
FOR A SERVER APPLICATION

Atty Docket: 1503/9





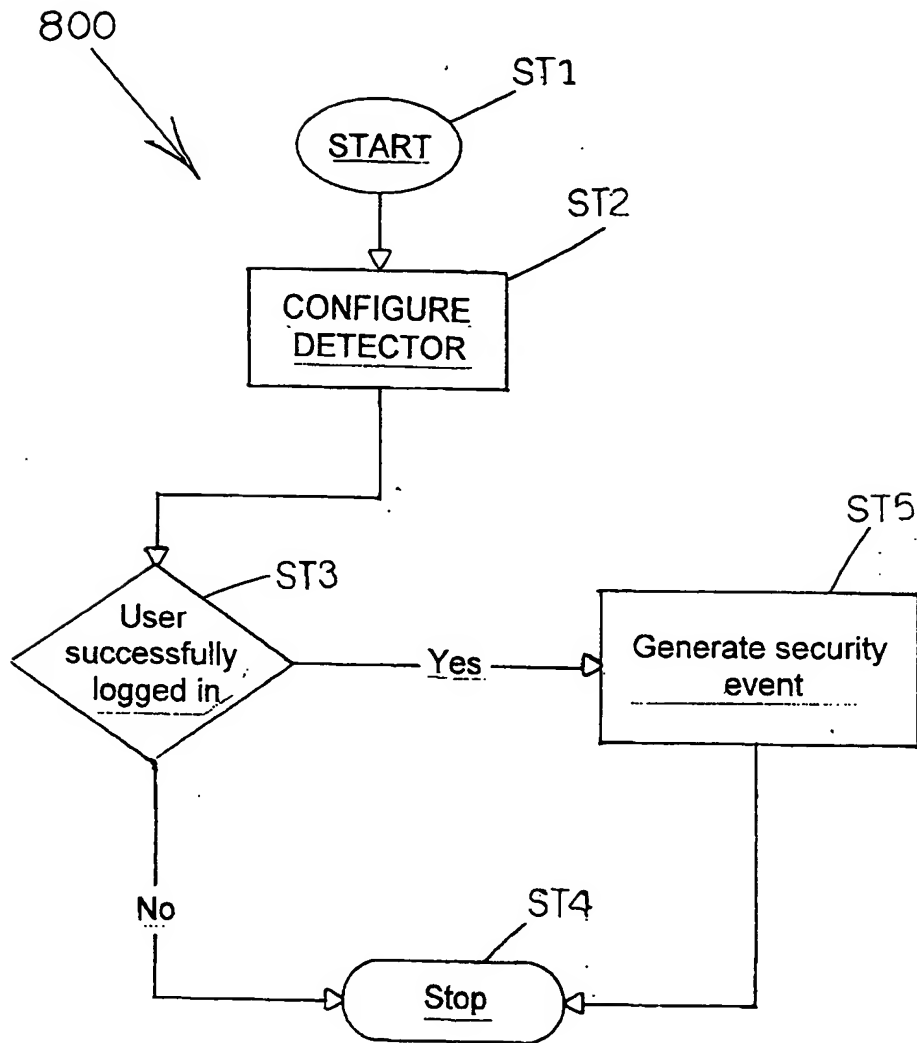


Fig. 8

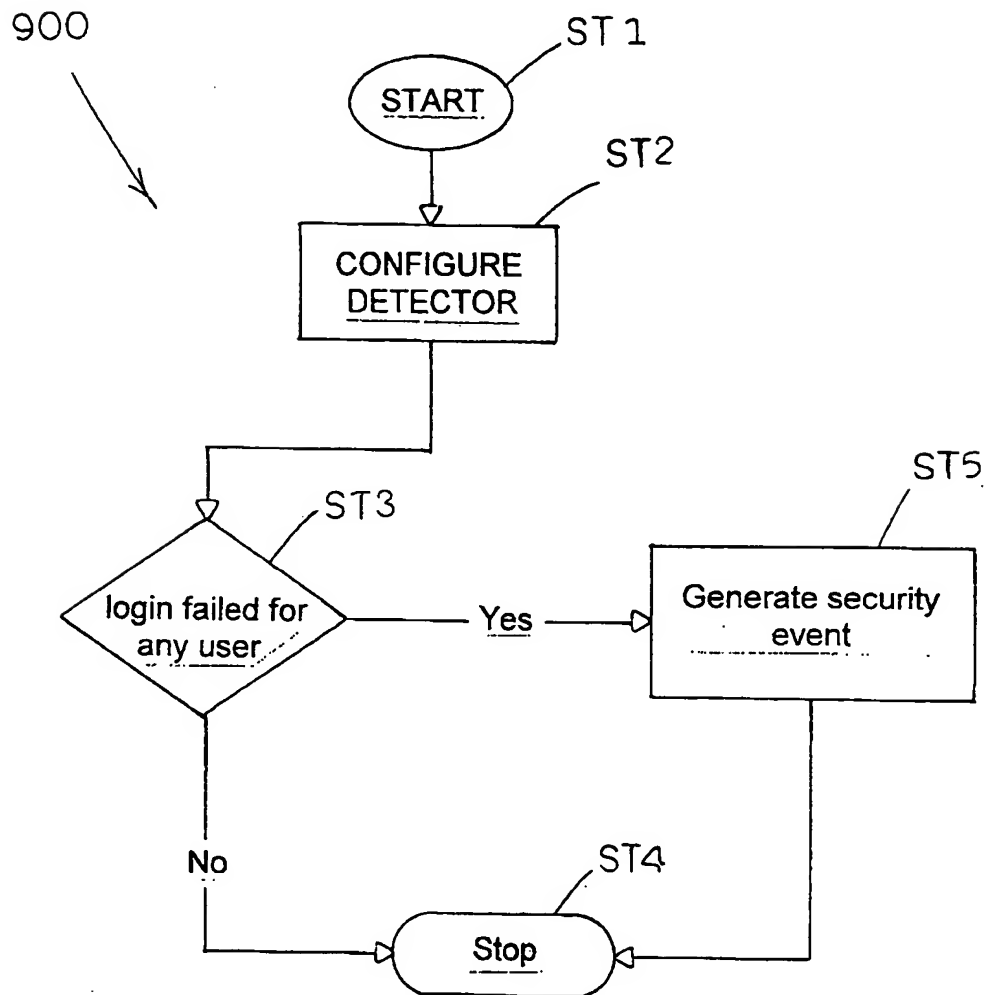


Fig. 9

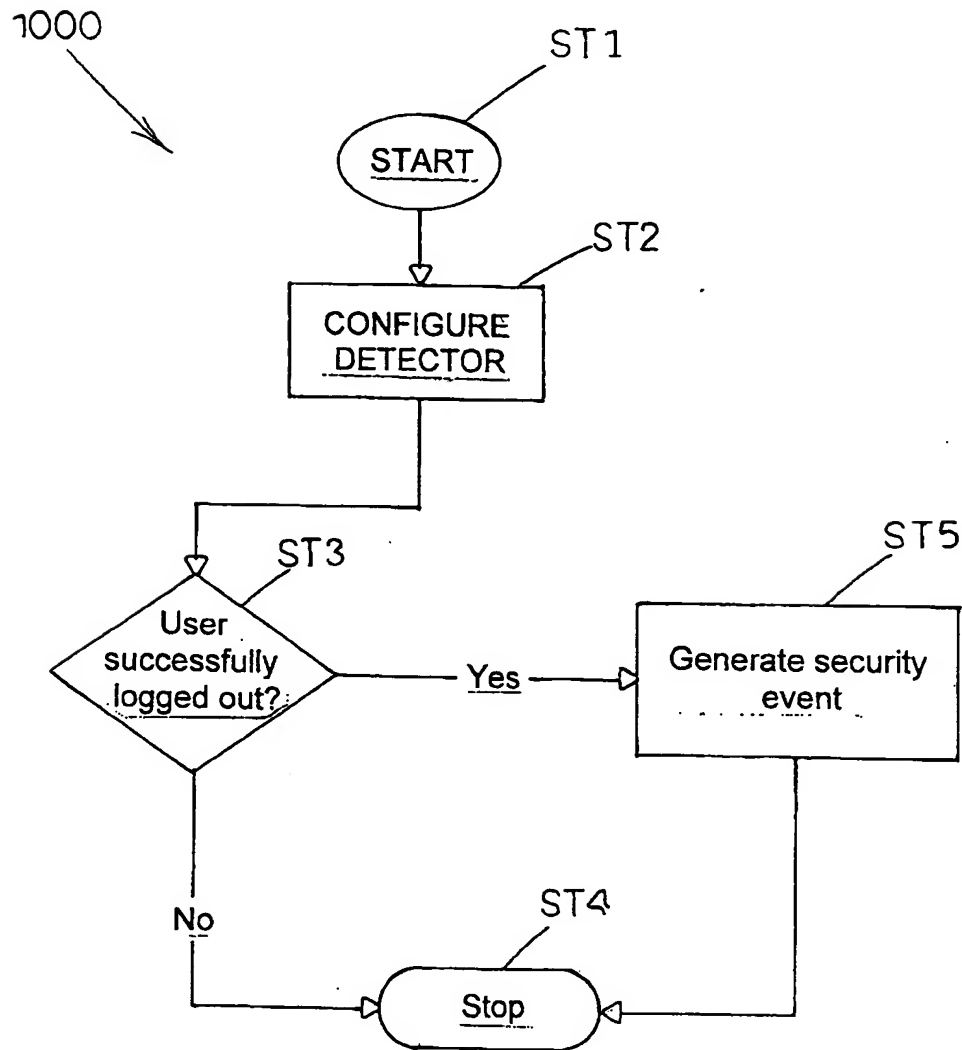


Fig. 10

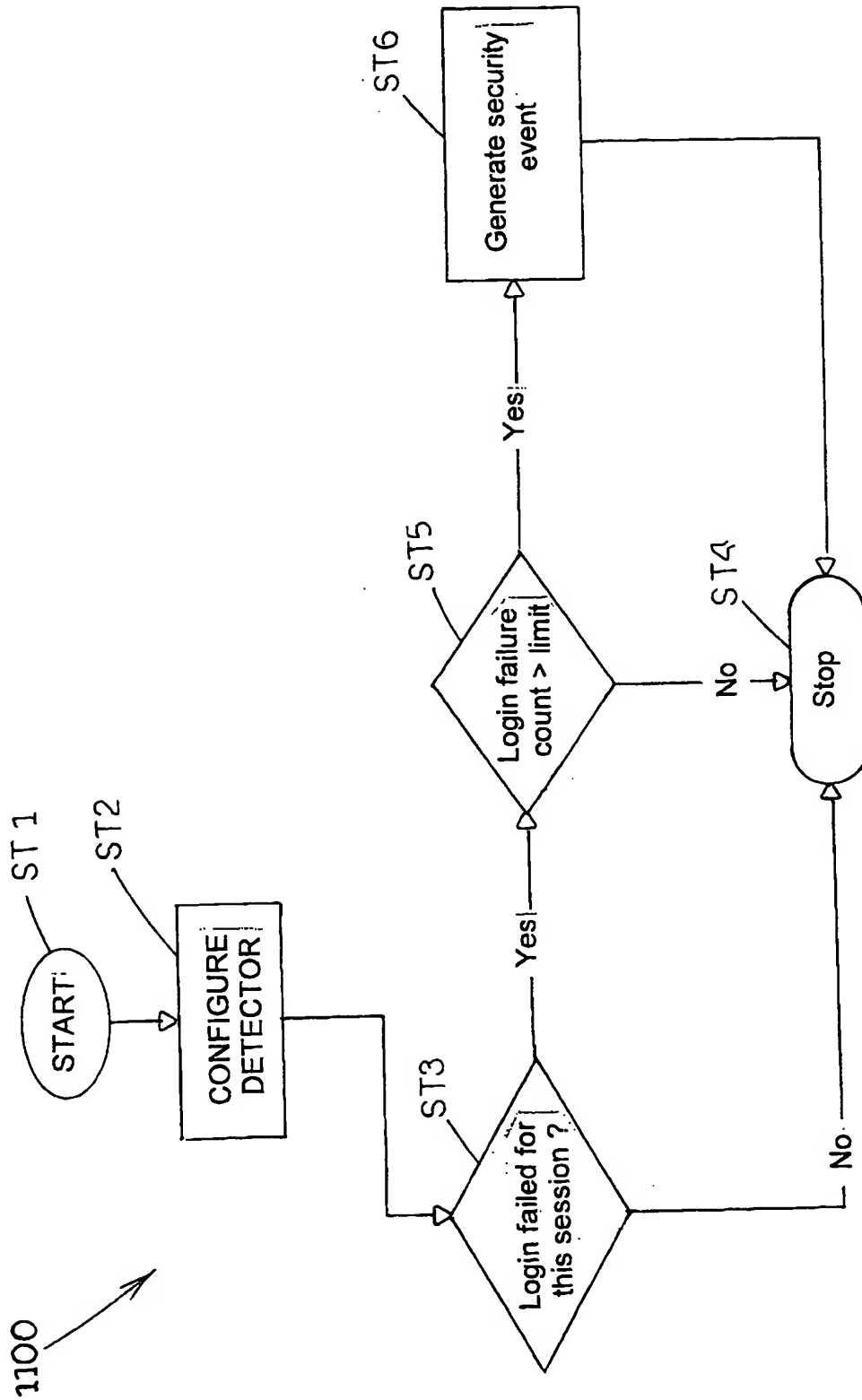


Fig. 11

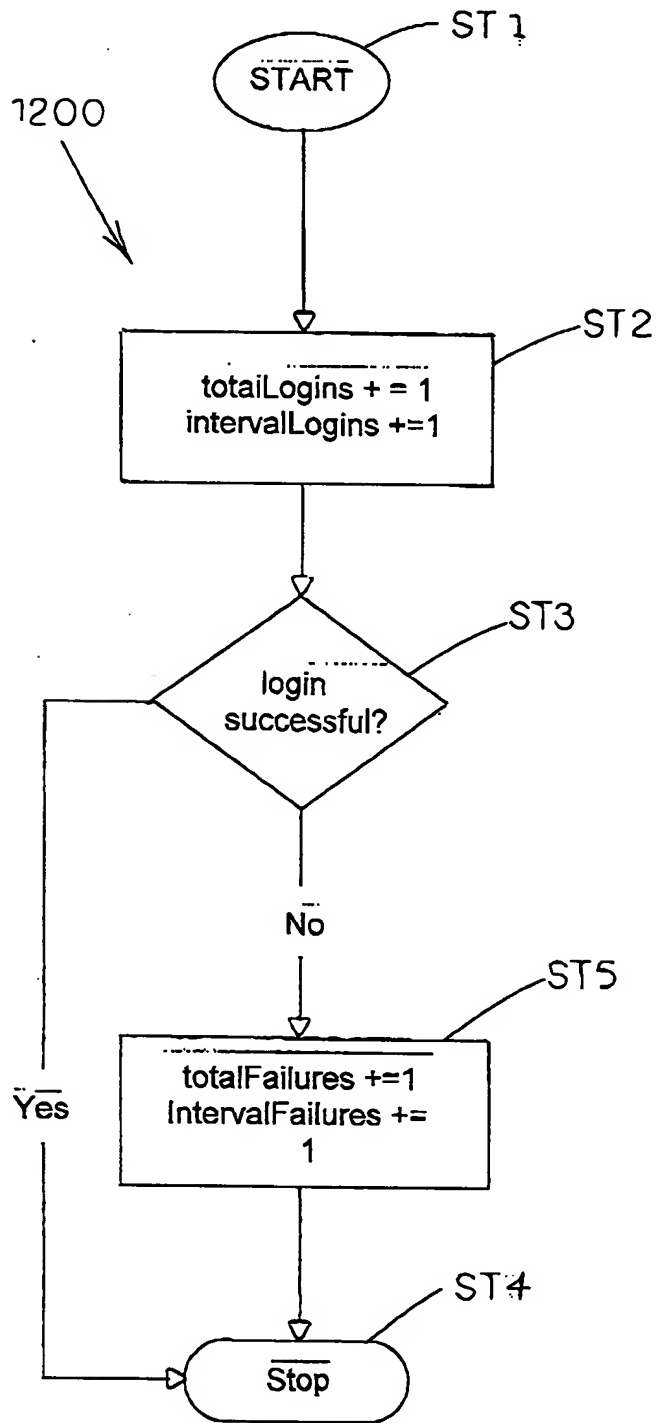


Fig. 12A

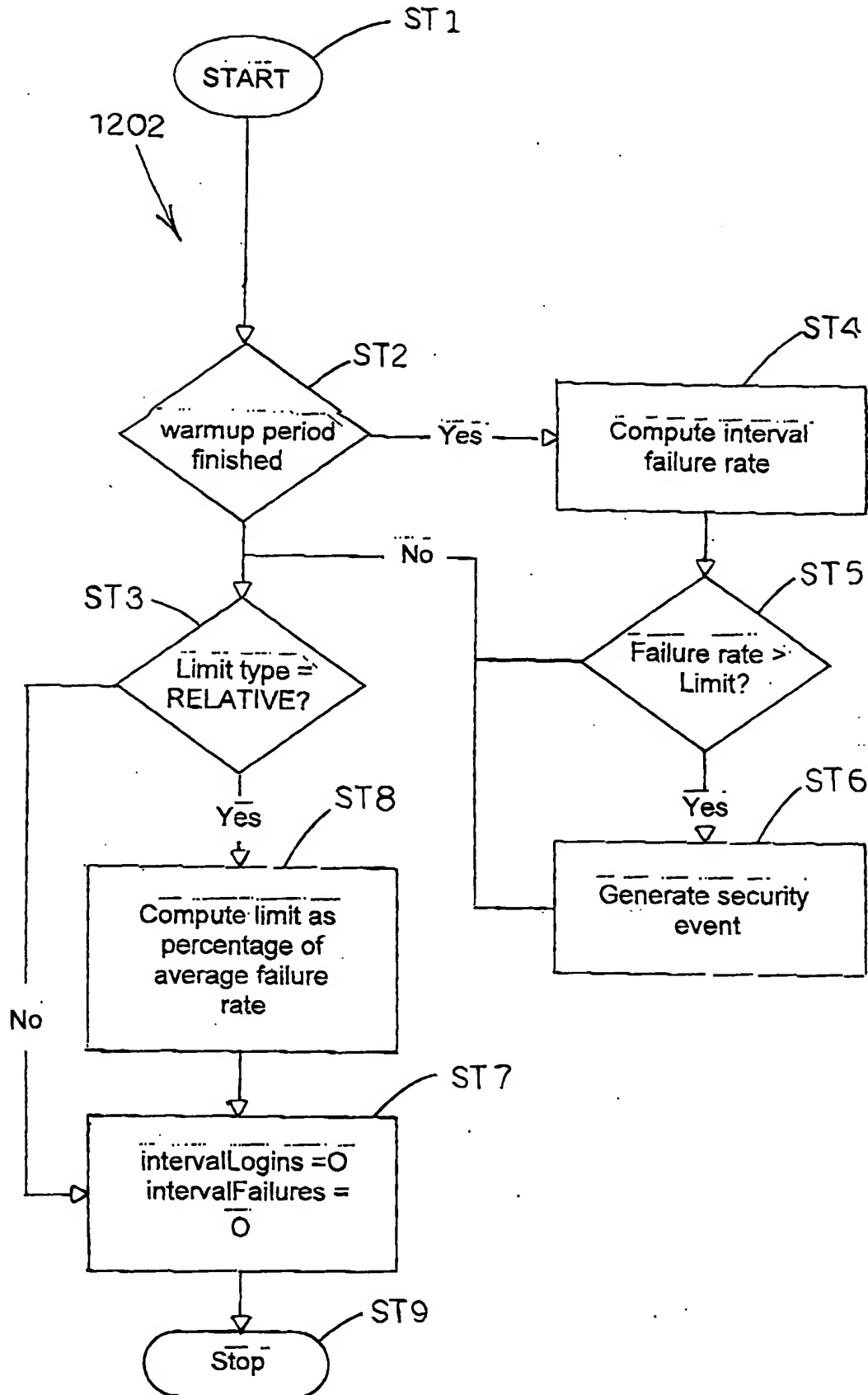


Fig. 12B

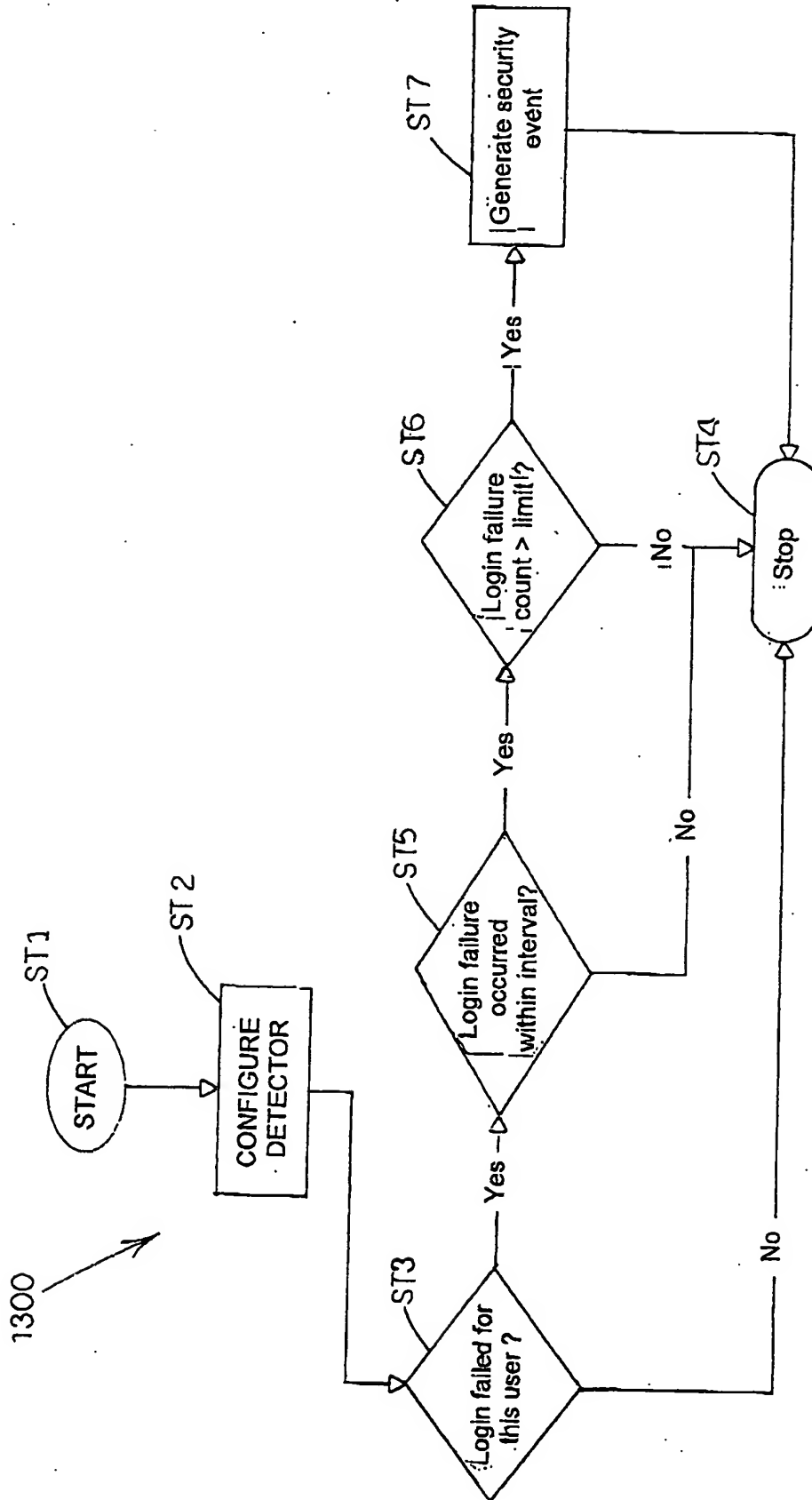


Fig. 13

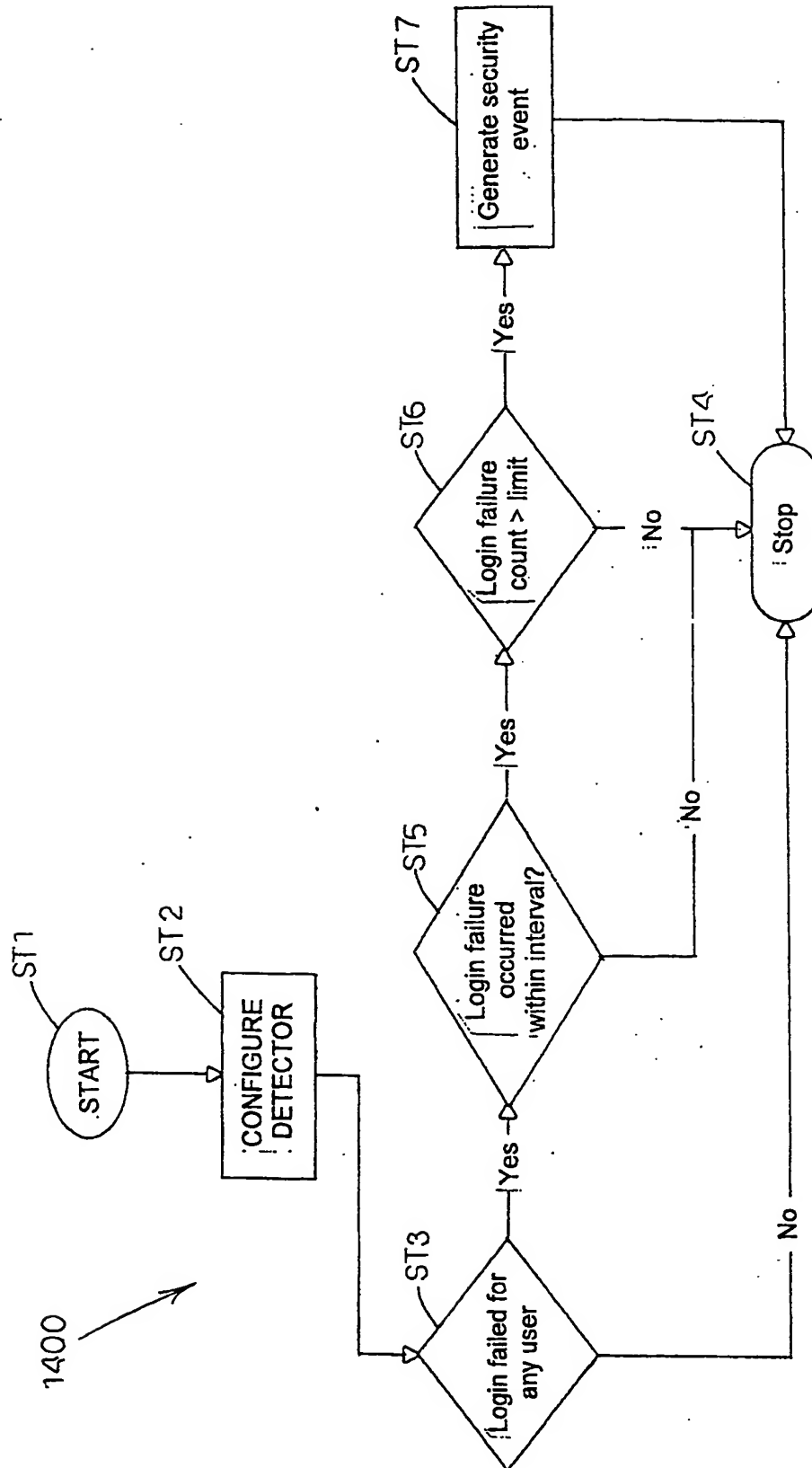


Fig. 14

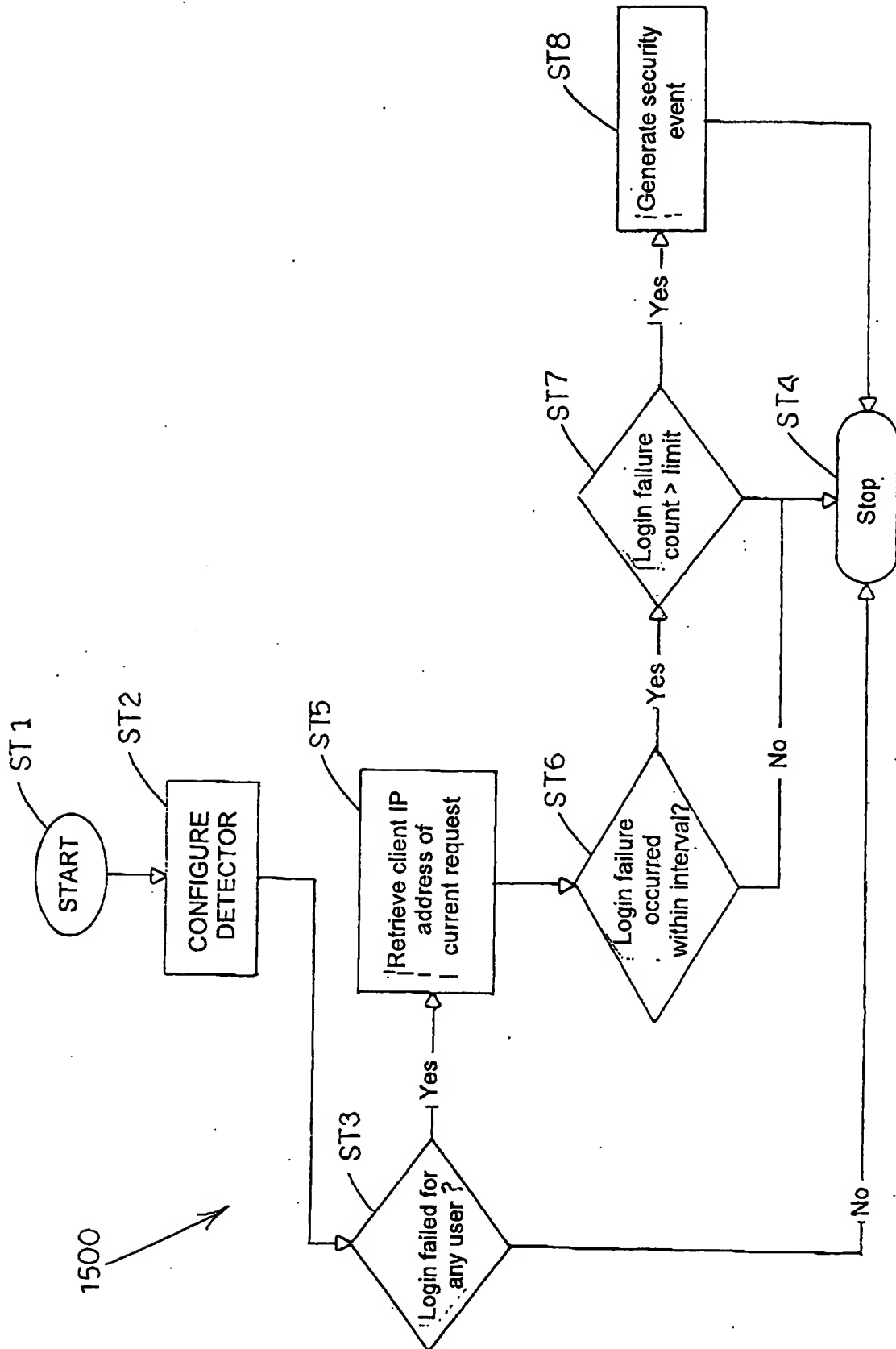
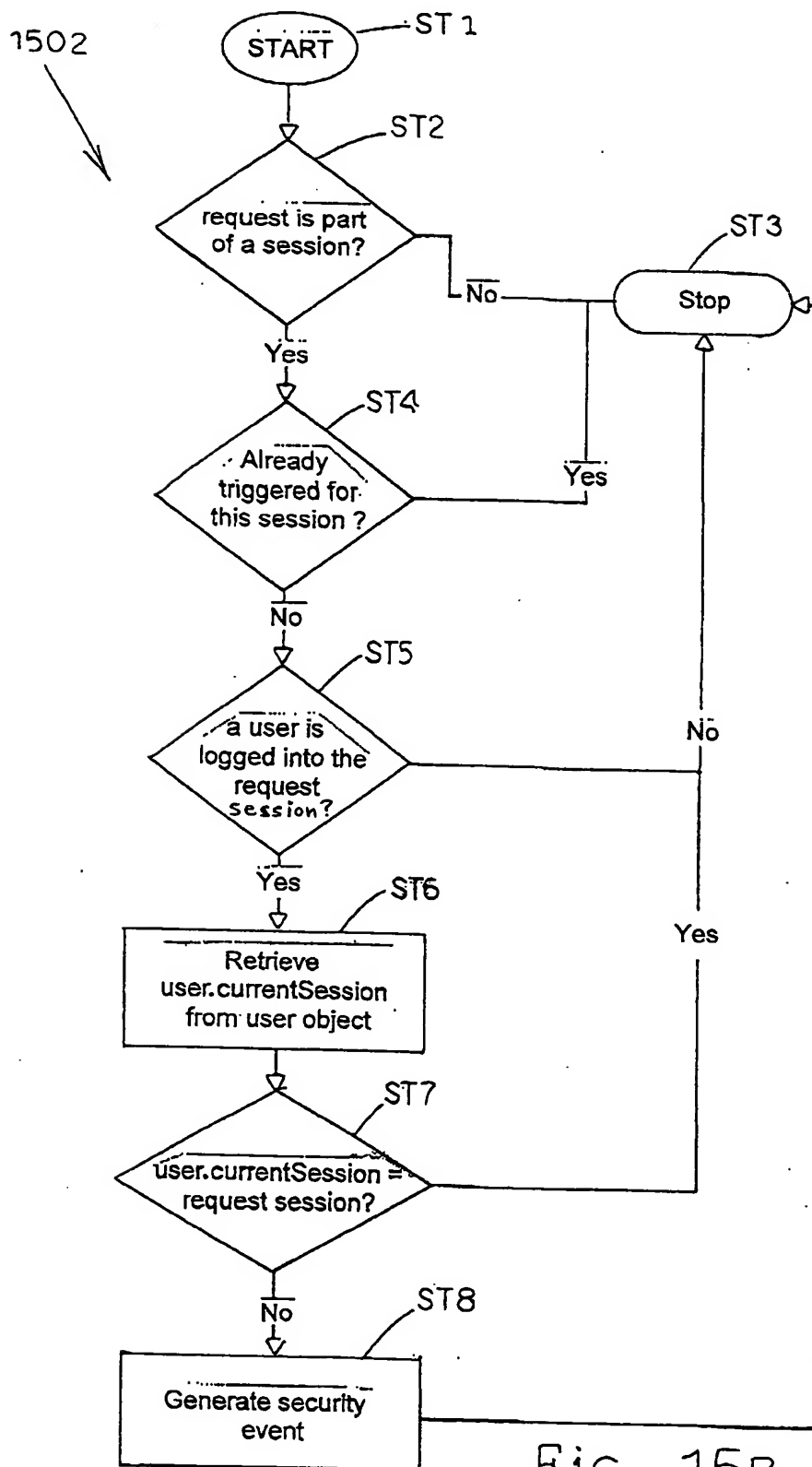


Fig. 15A



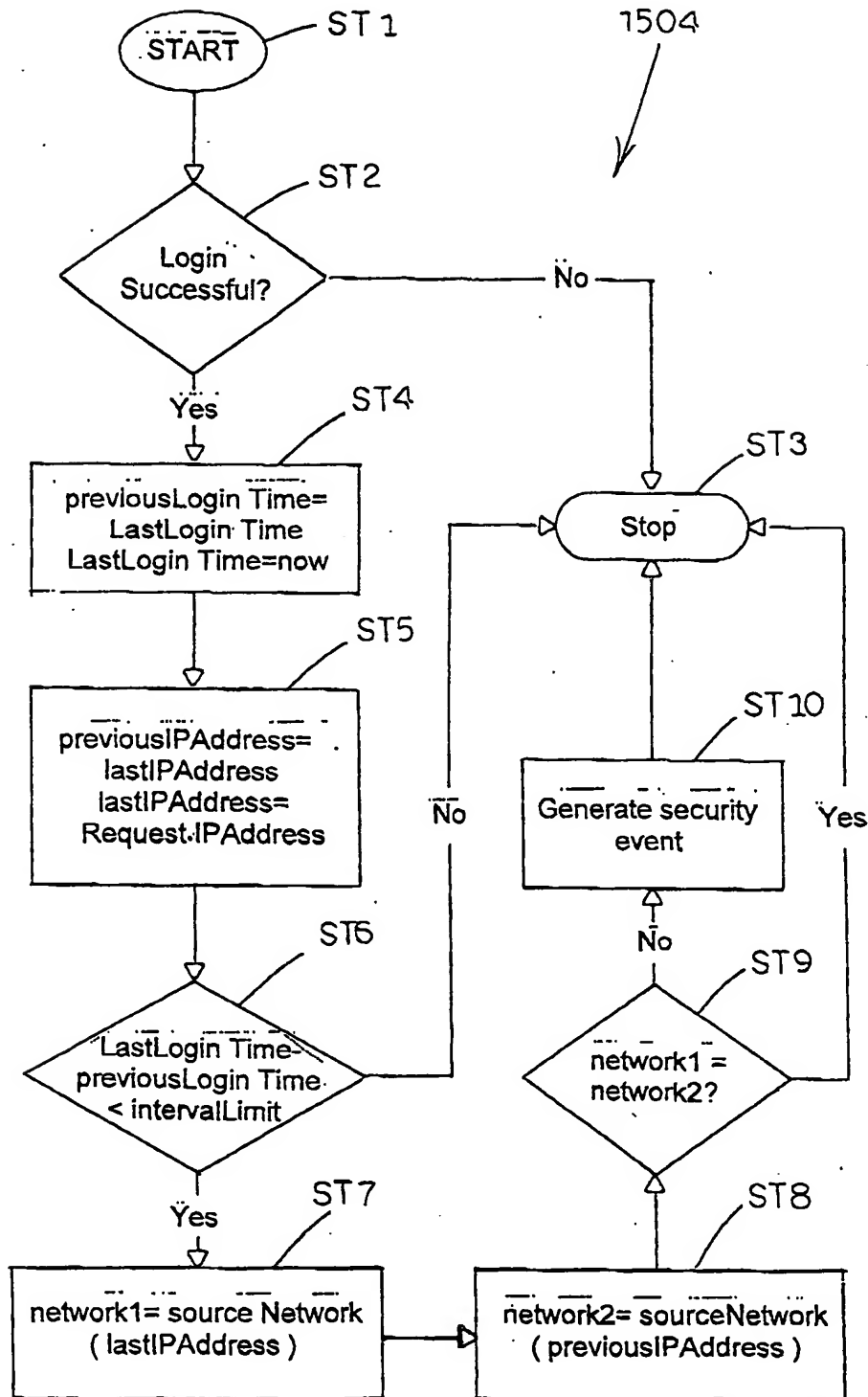
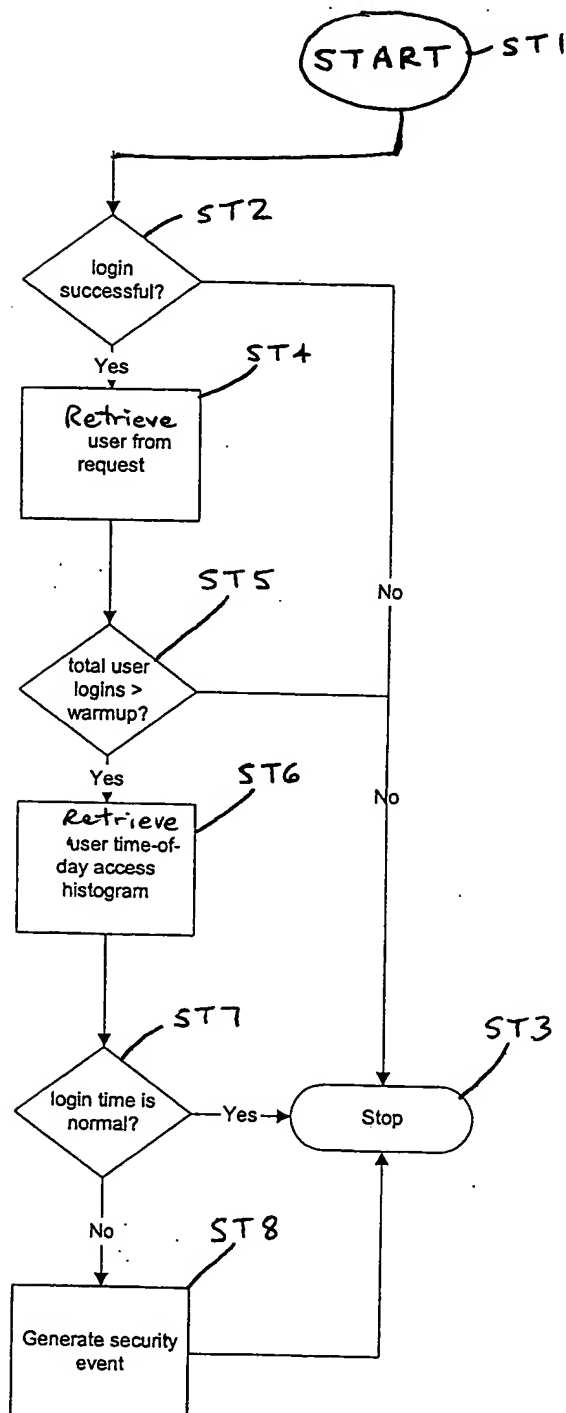


Fig. 15c

1600
↓
FIG. 16A



1602
↓
FIG. 16B

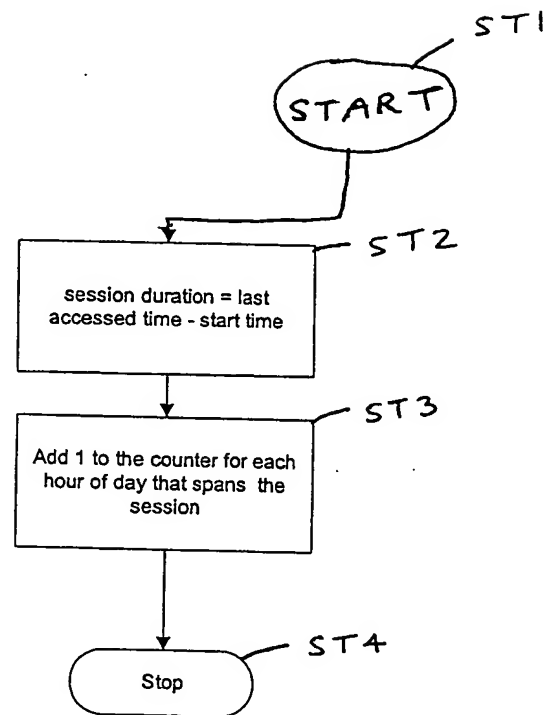


FIG. 17A

1700
↓

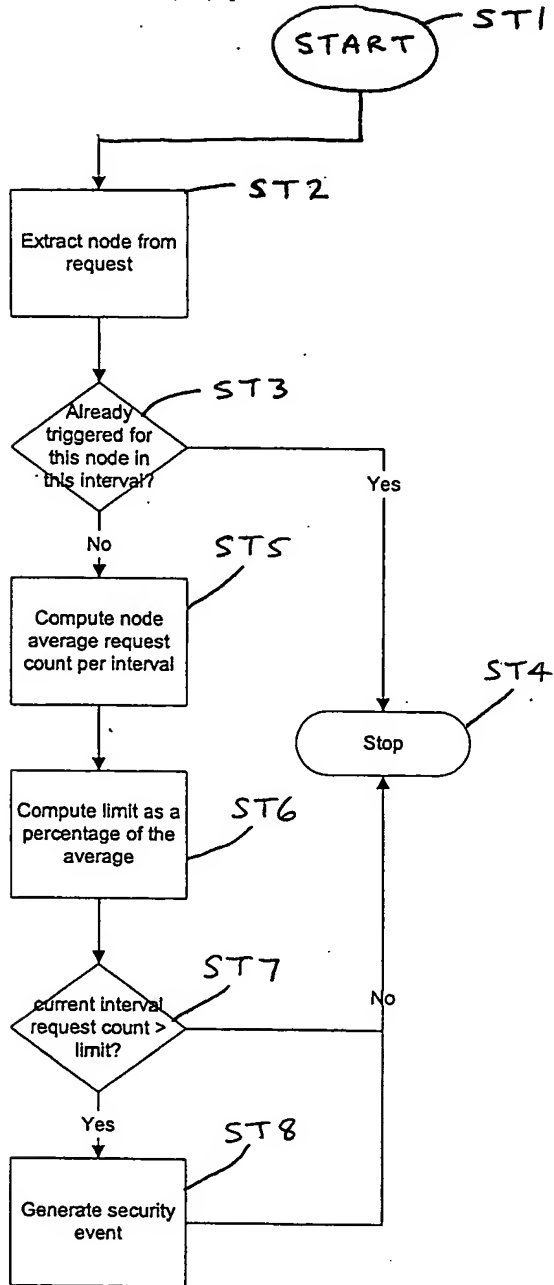


FIG. 17B

1702

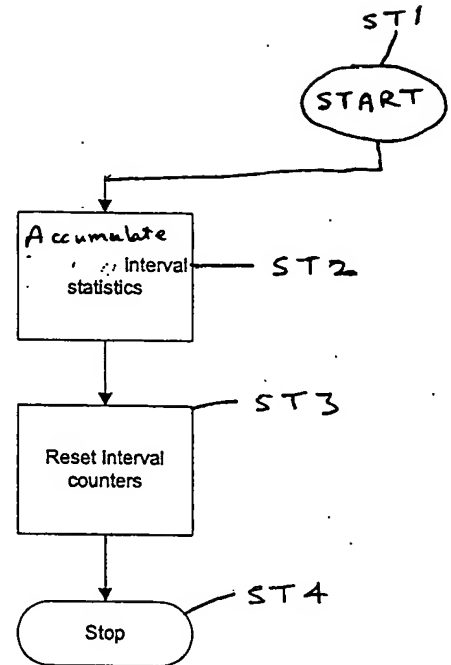


FIG. 18

1800
↓

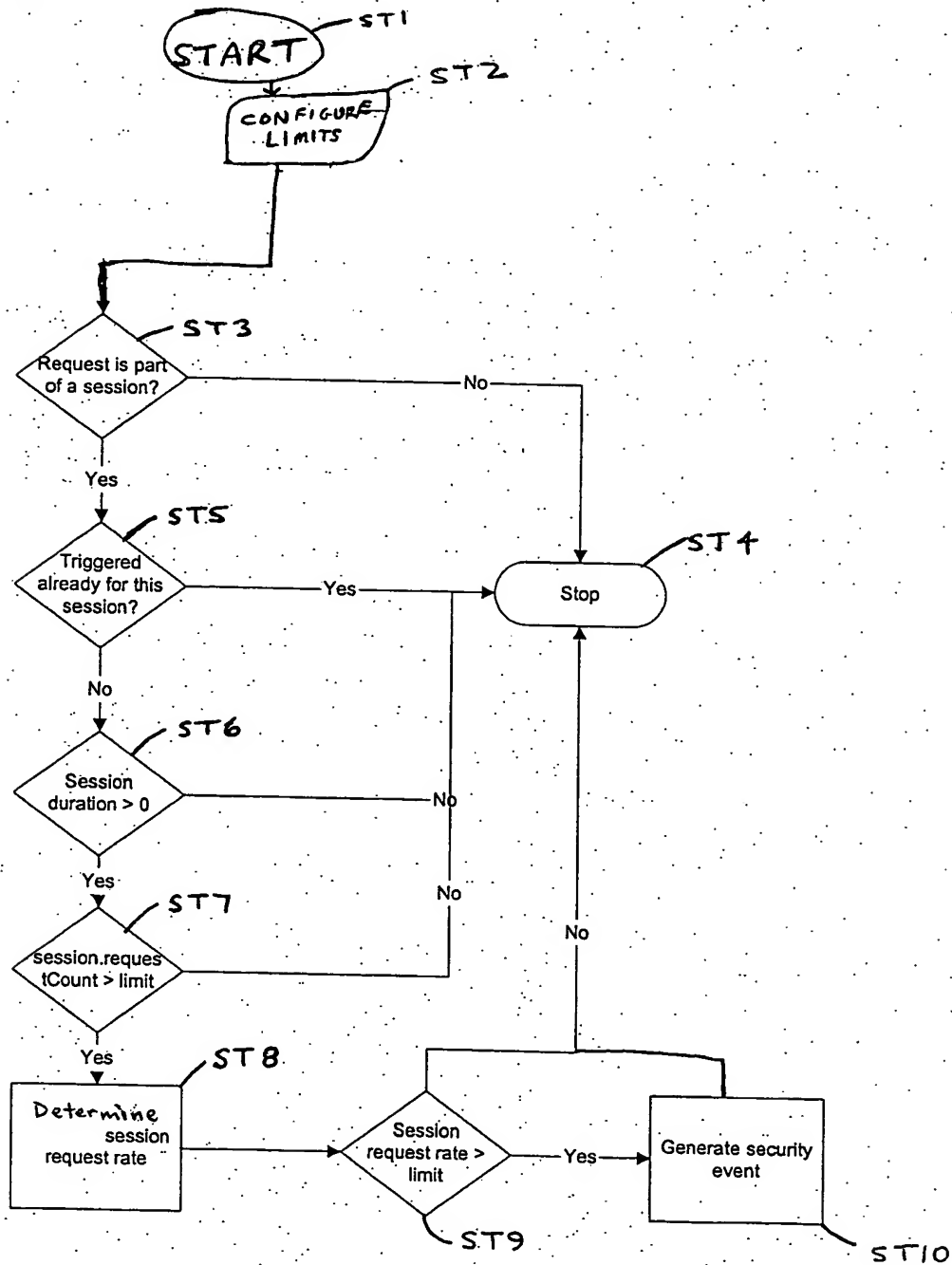
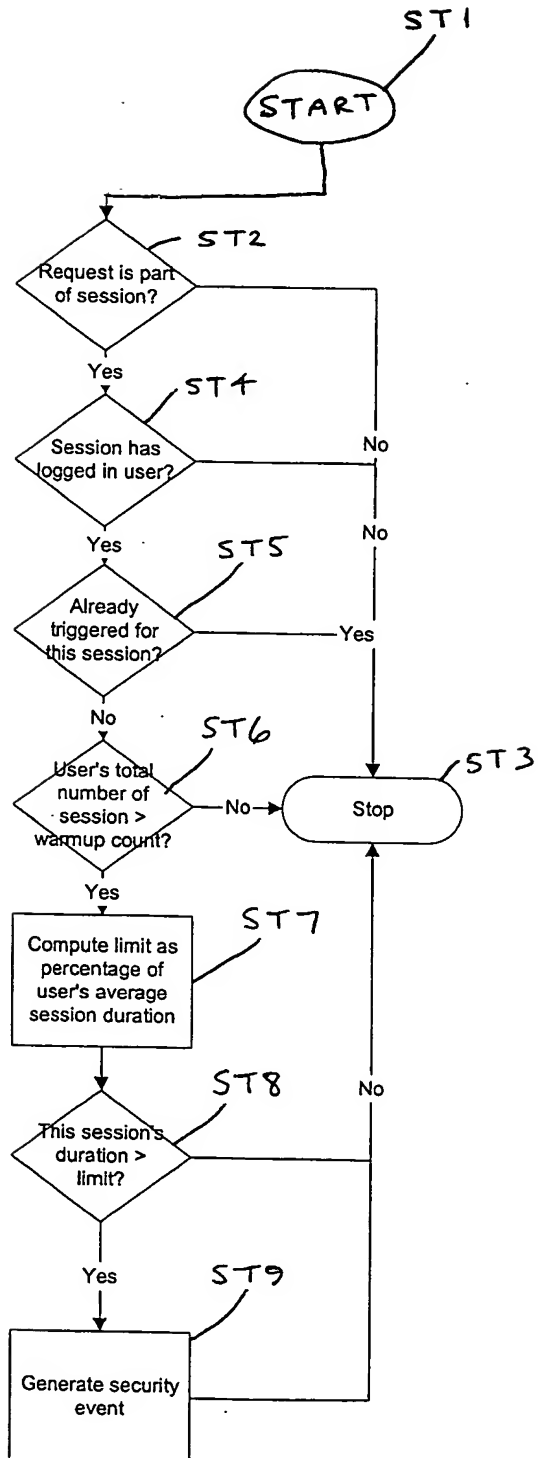


FIG. 19A

FIG. 19B

19 00
↓



1902
↓

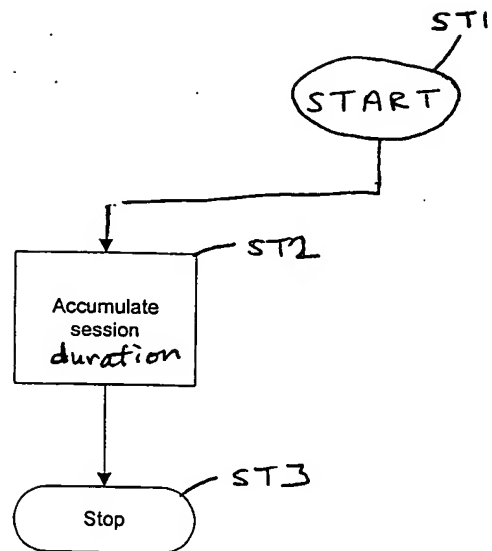


FIG. 20A

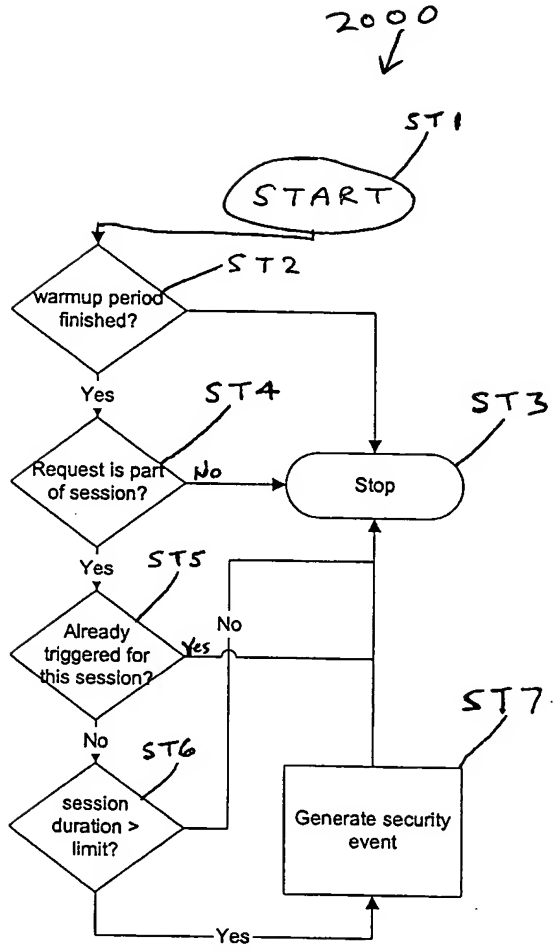
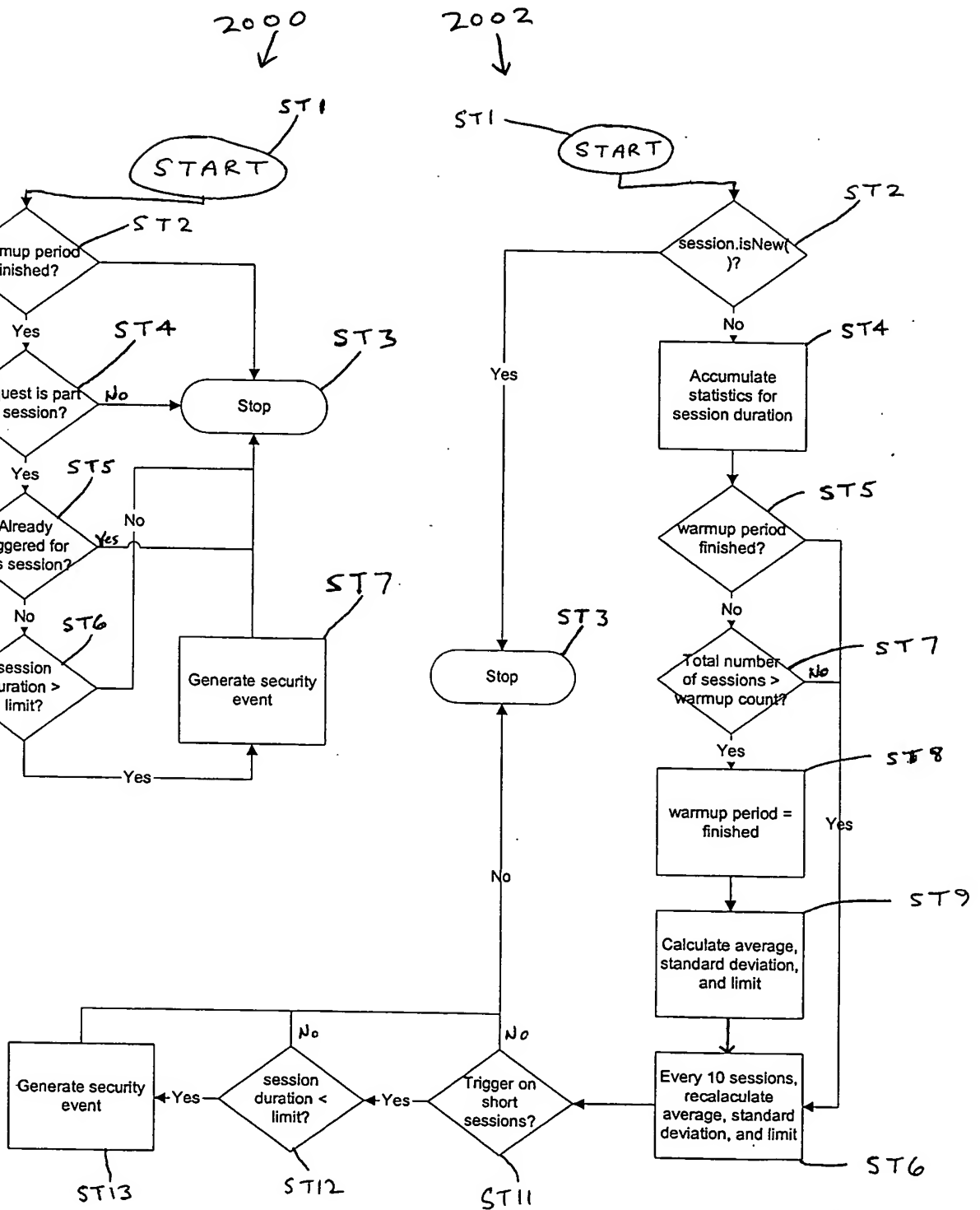


FIG. 20B



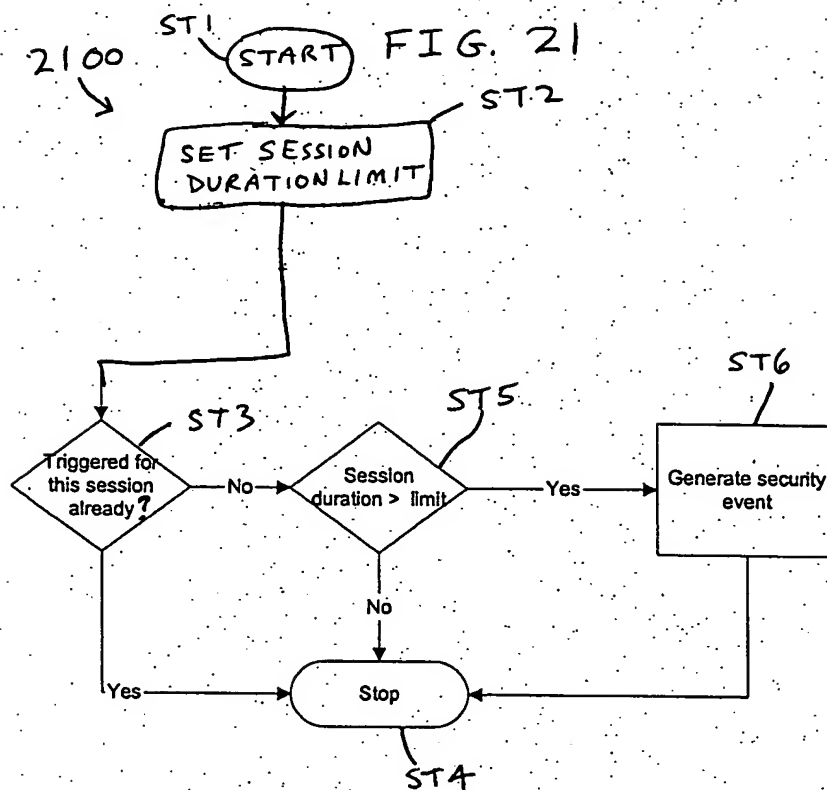


FIG. 22A

2200
↓

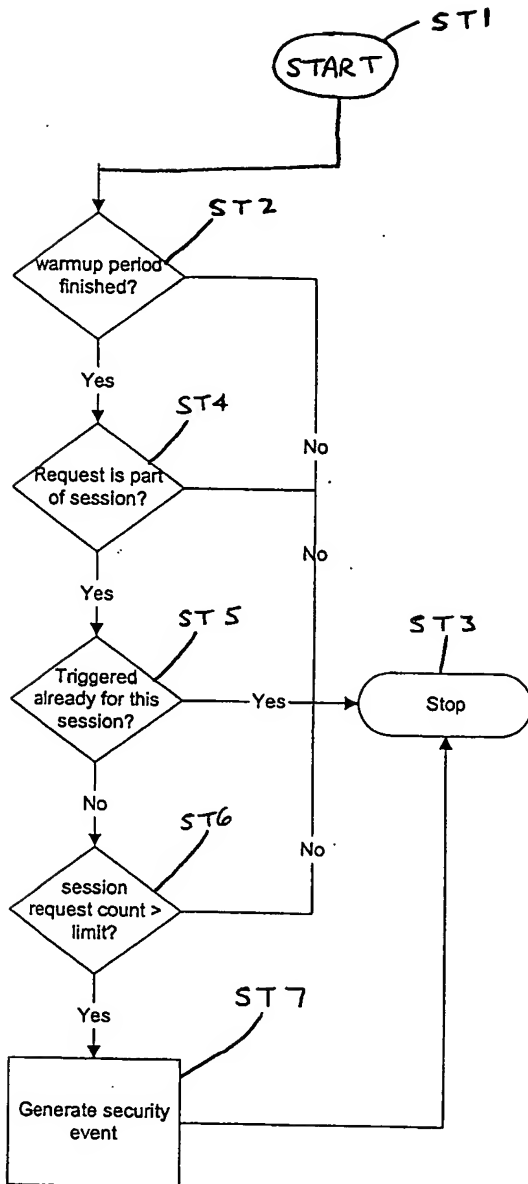


FIG. 22B

2202
↓

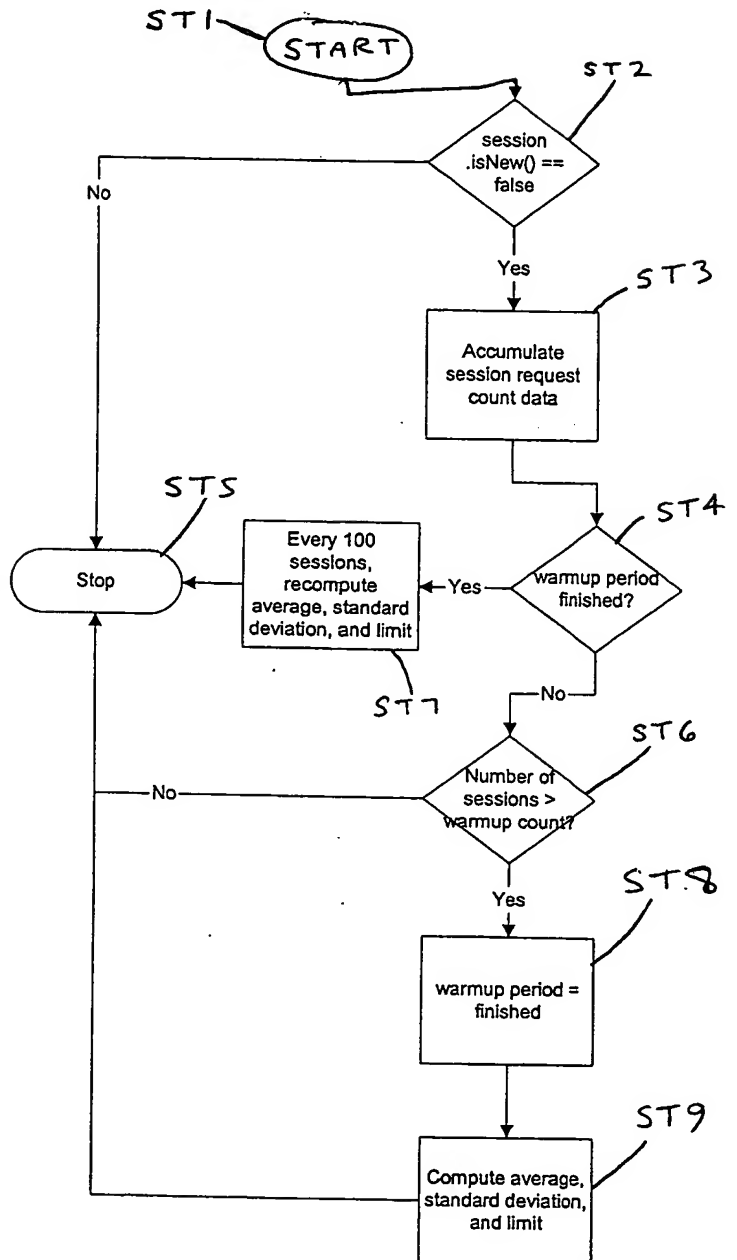


FIG. 23A

2300
↓

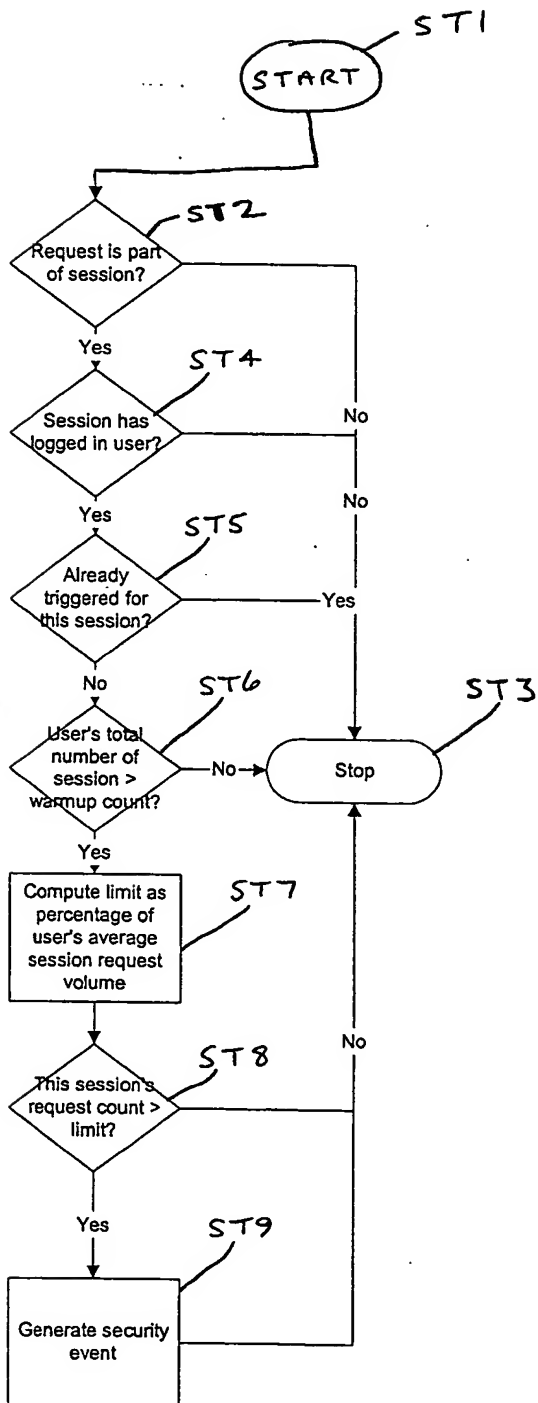
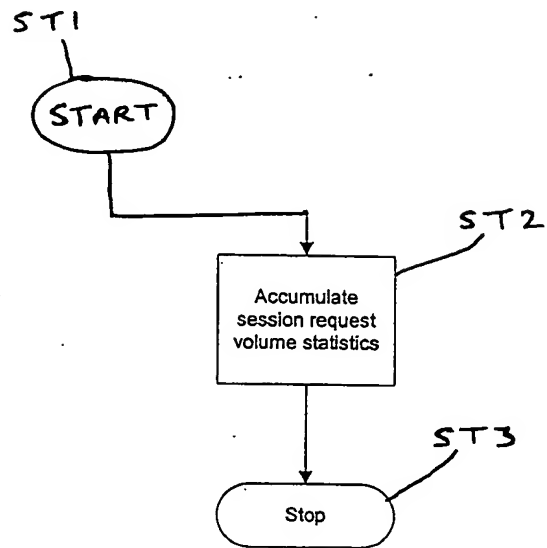


FIG. 23B

2302
↓



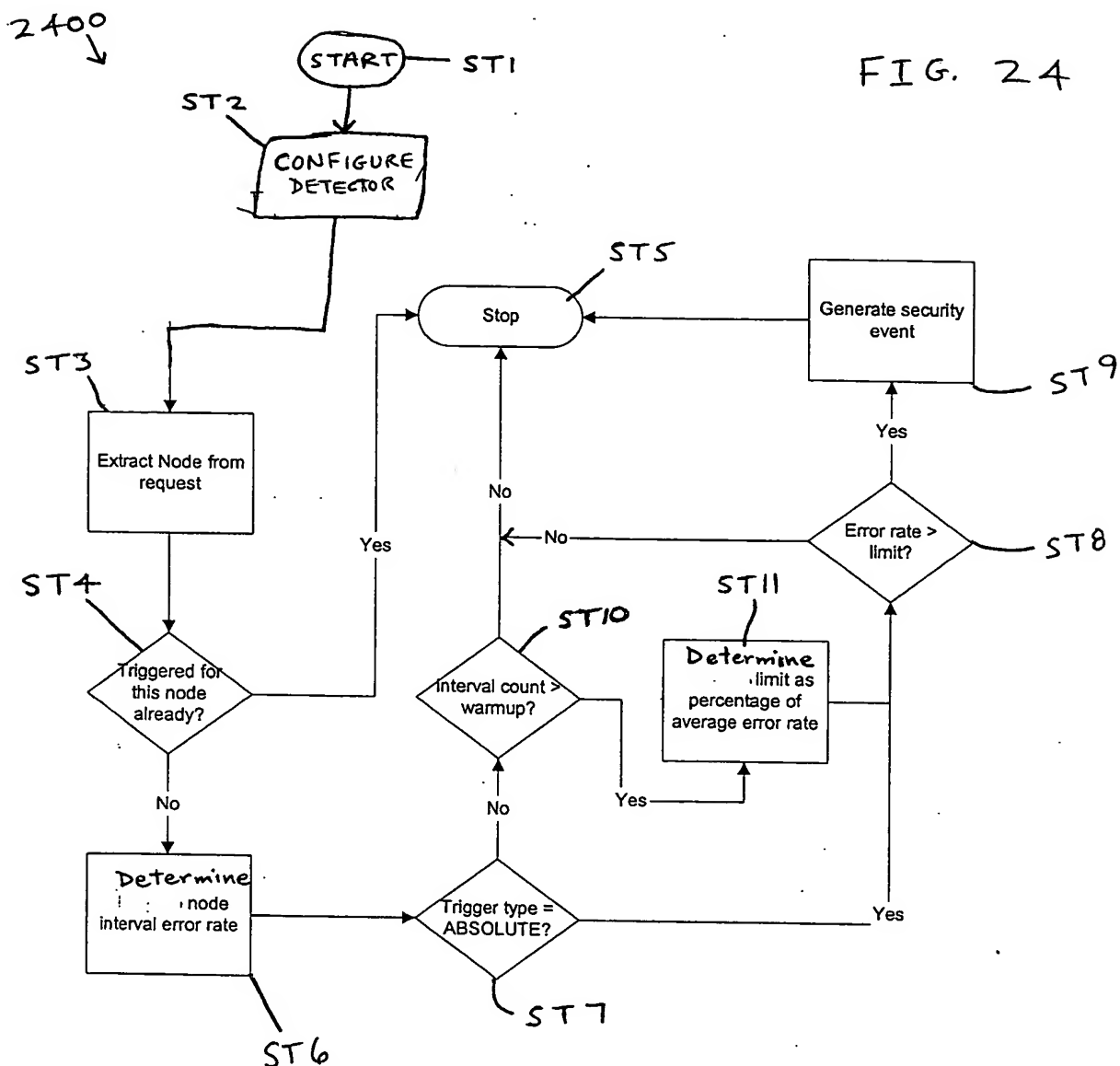
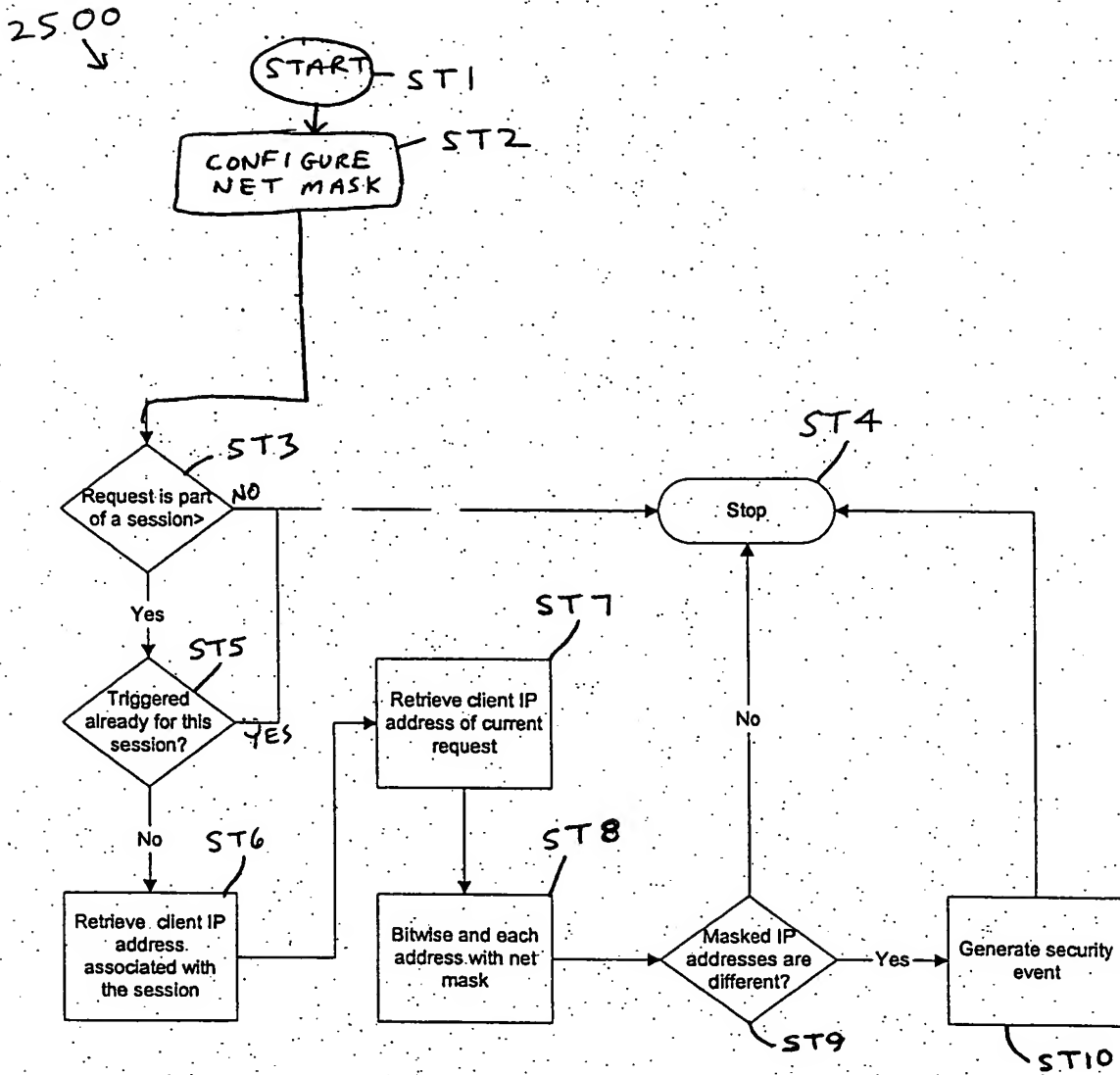


FIG. 25



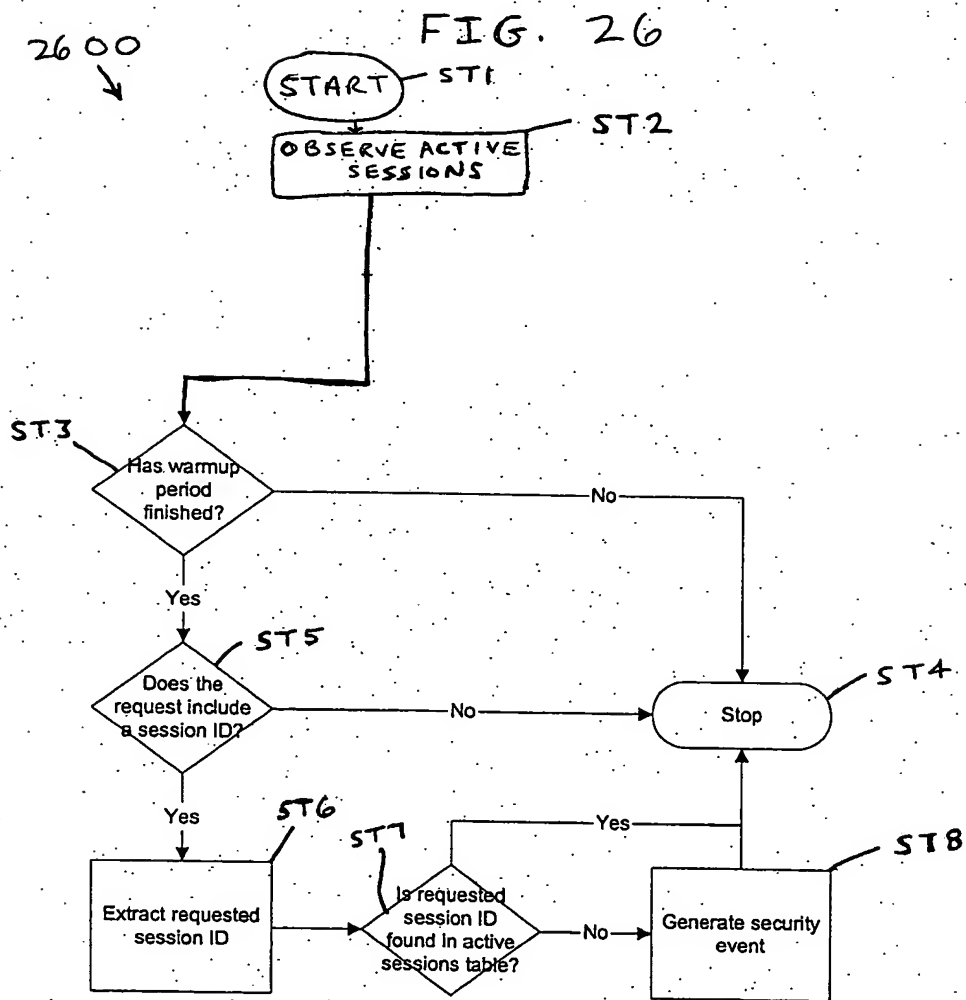
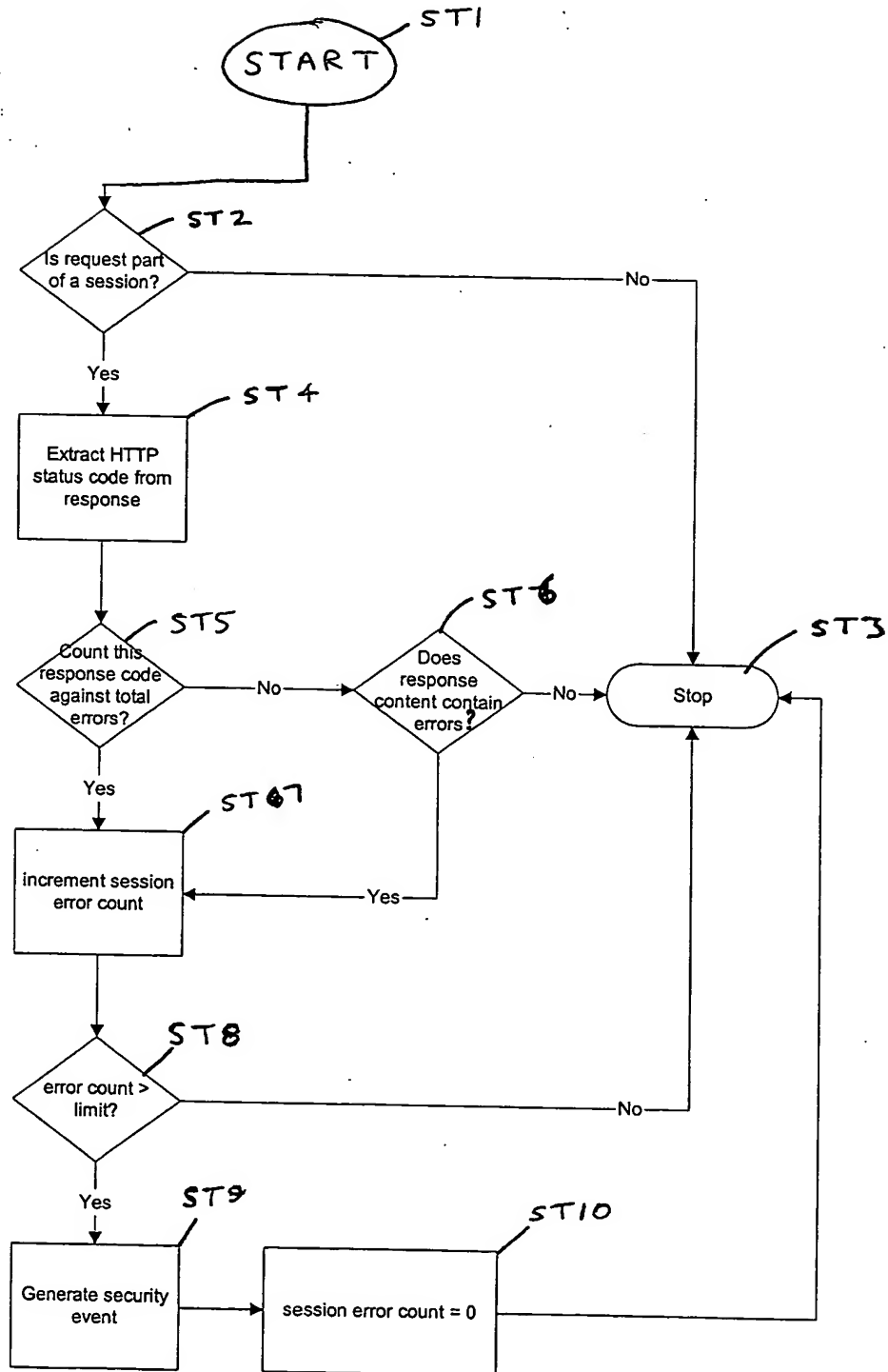


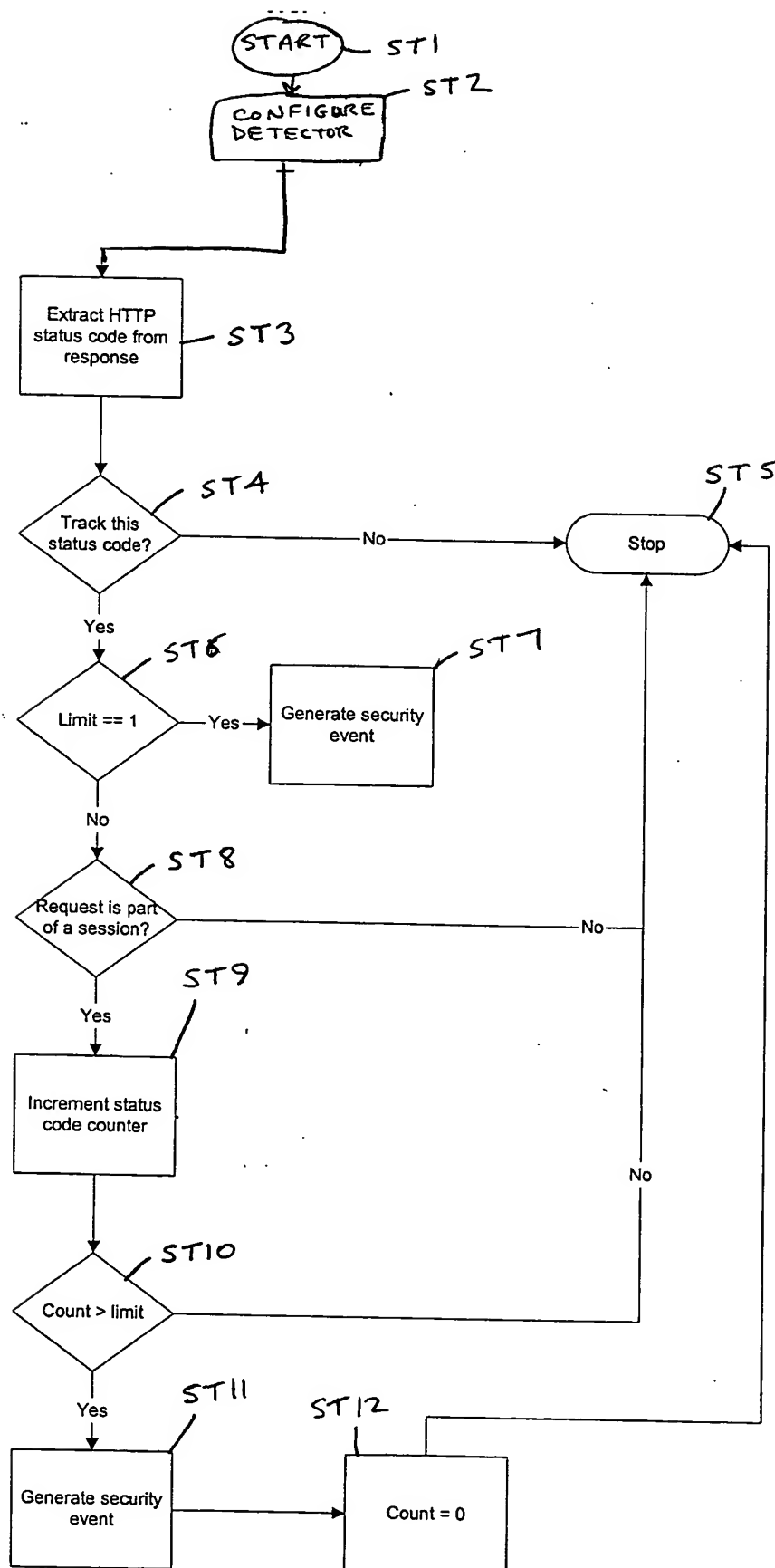
FIG. 27

2700
↓



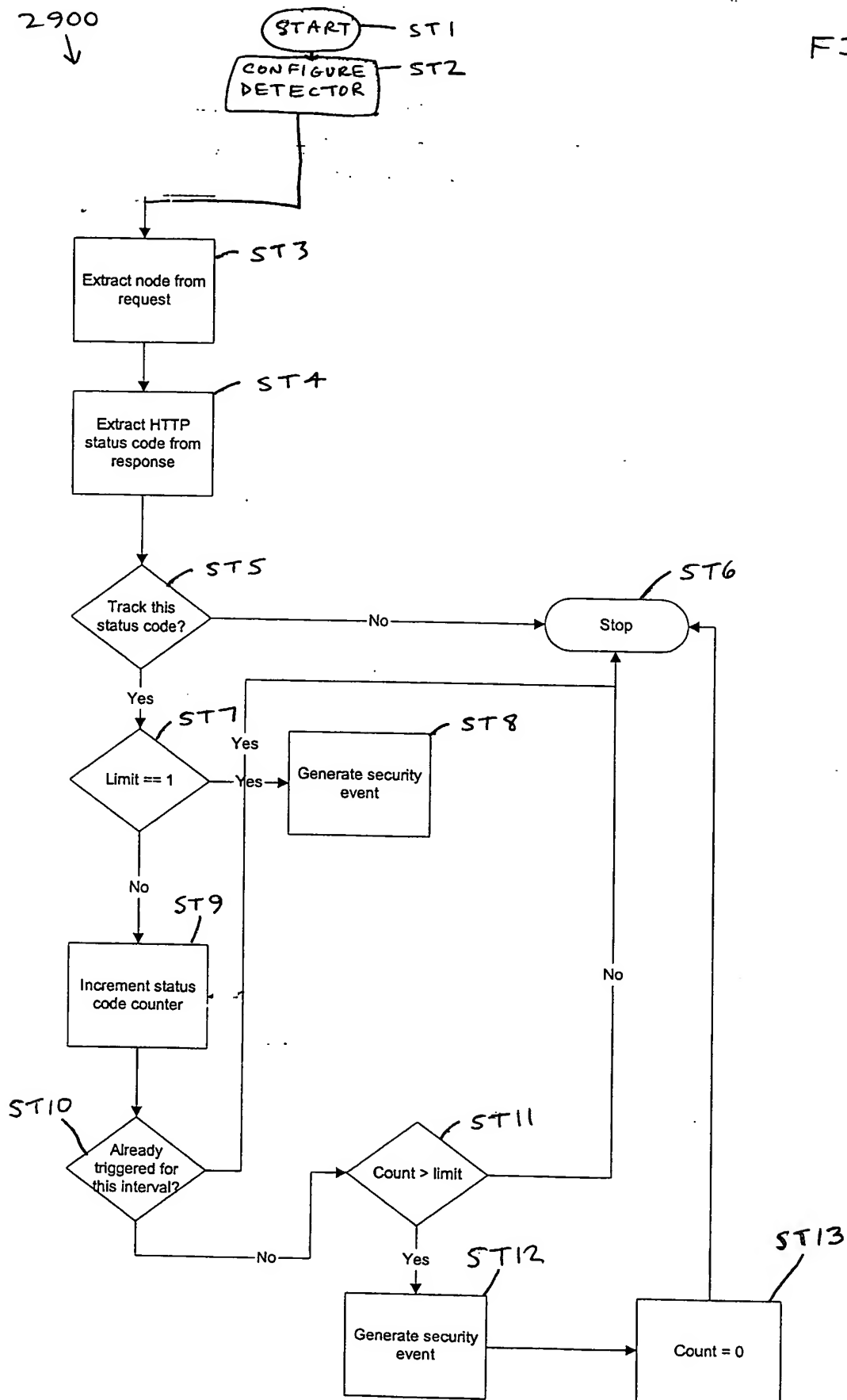
28.00
↓

FIG. 28



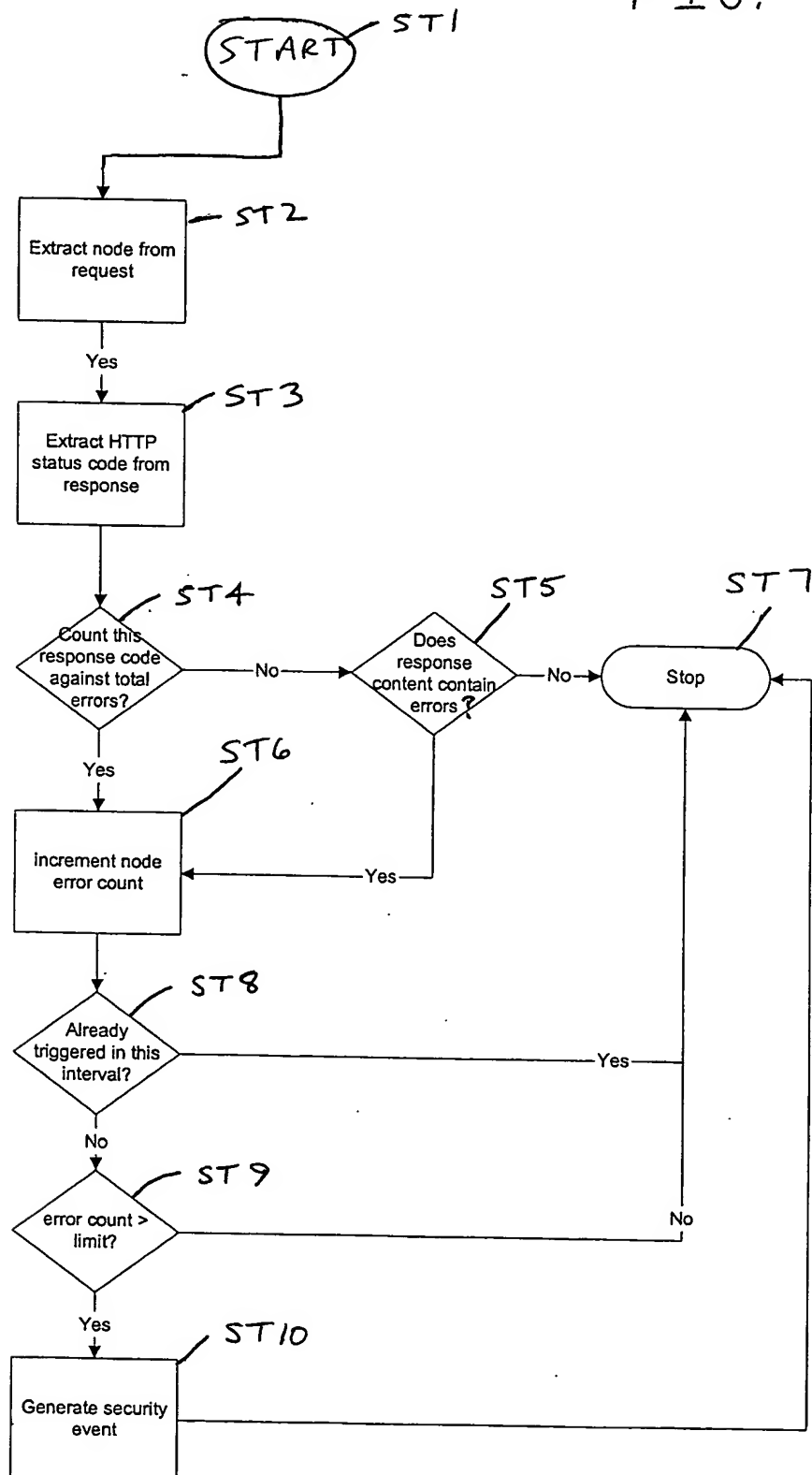
2900
↓

FIG. 29



3000
↓

FIG. 30



3100
↓

FIG. 31

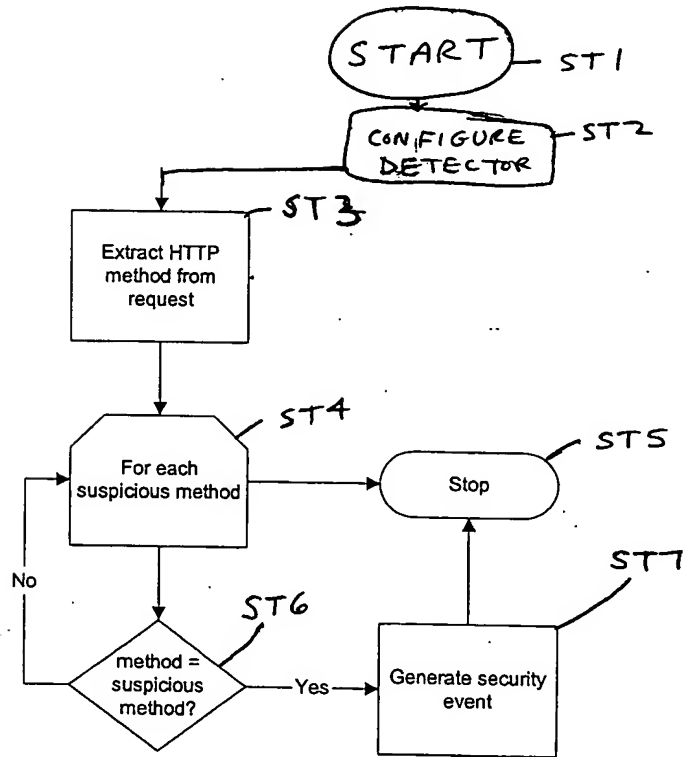
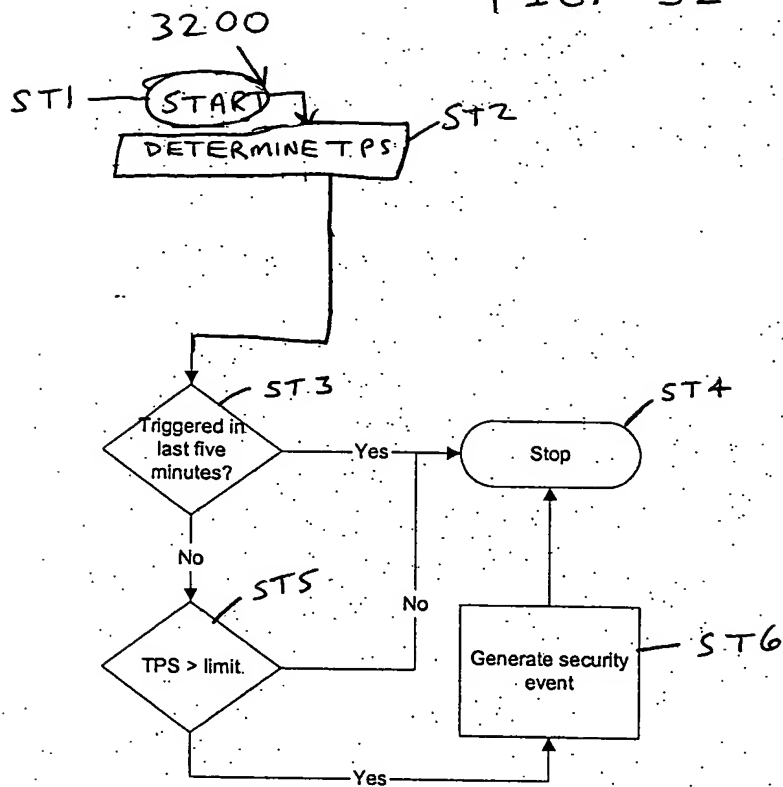


FIG. 32



3300 FIG. 33A.

FIG. 33B

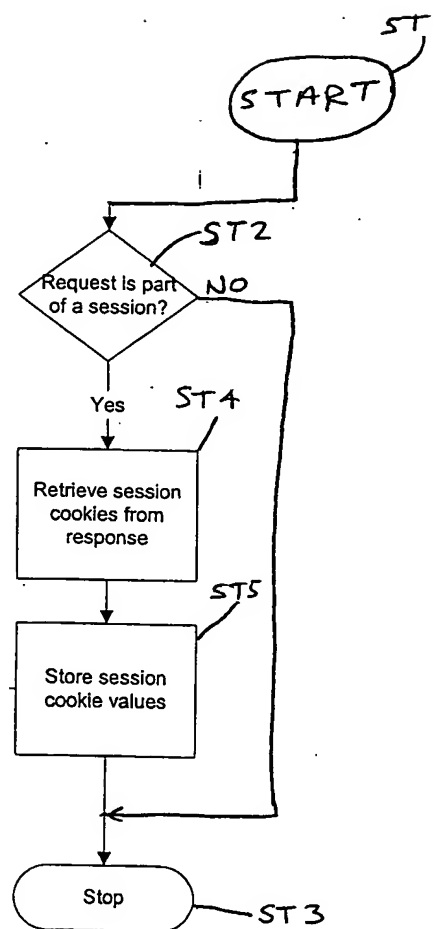
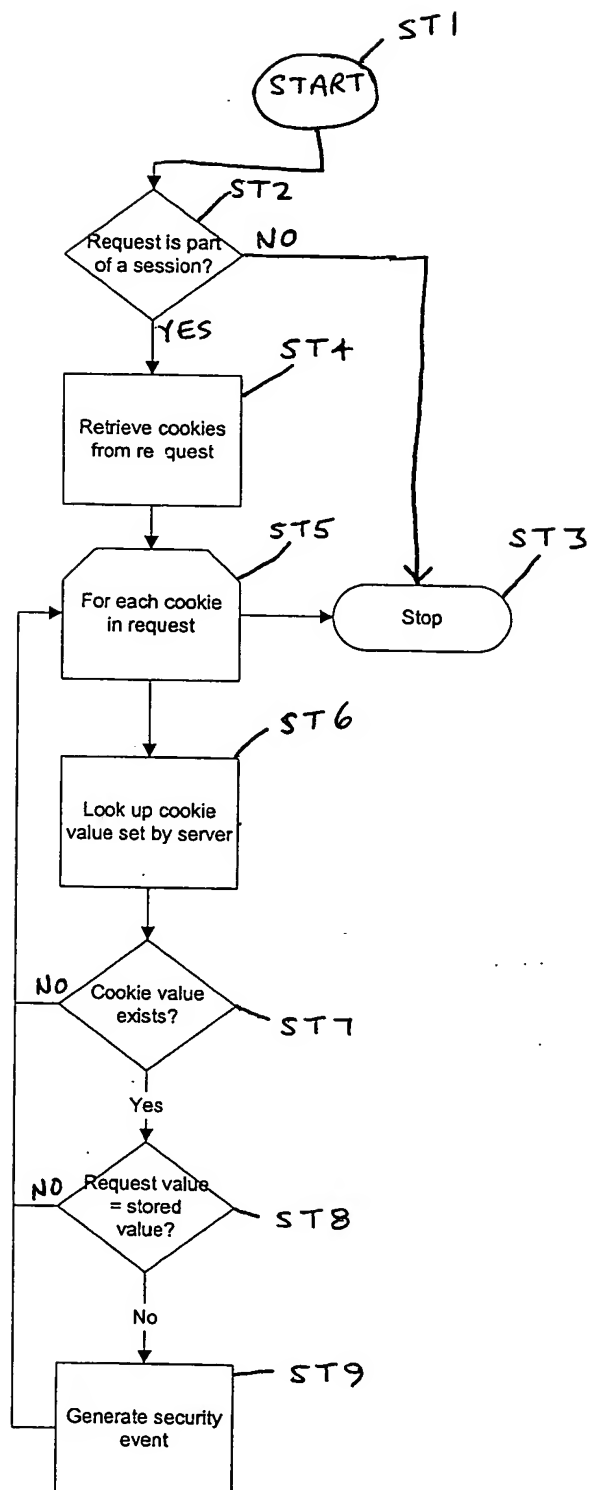


FIG. 34A

3400
↓

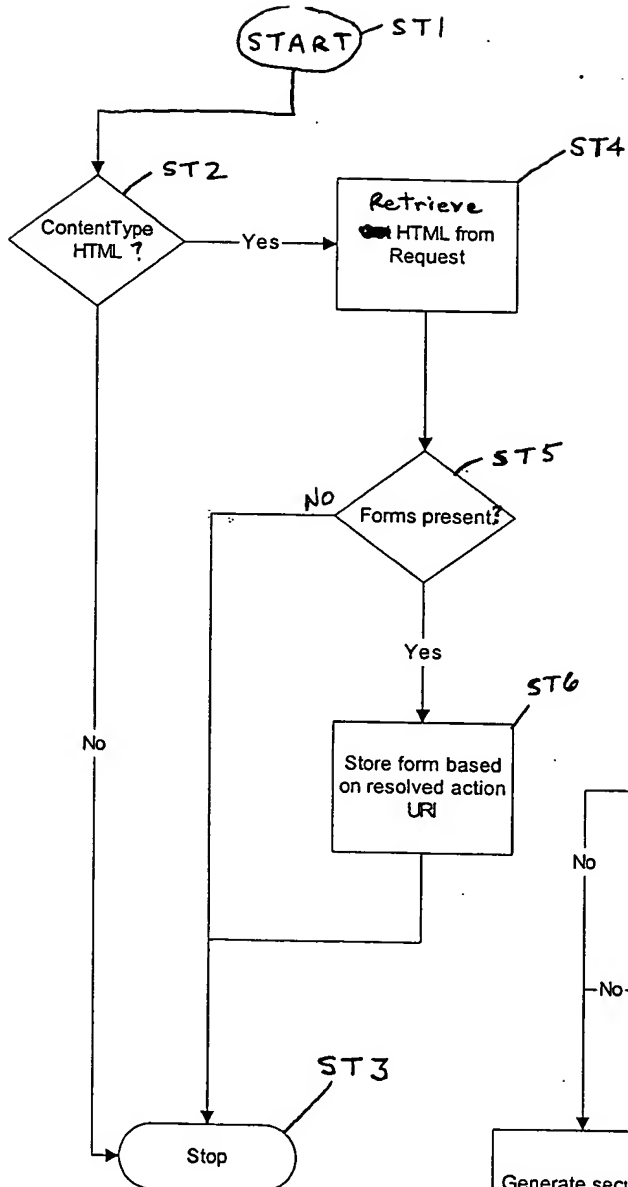


FIG. 34B

3402
↓

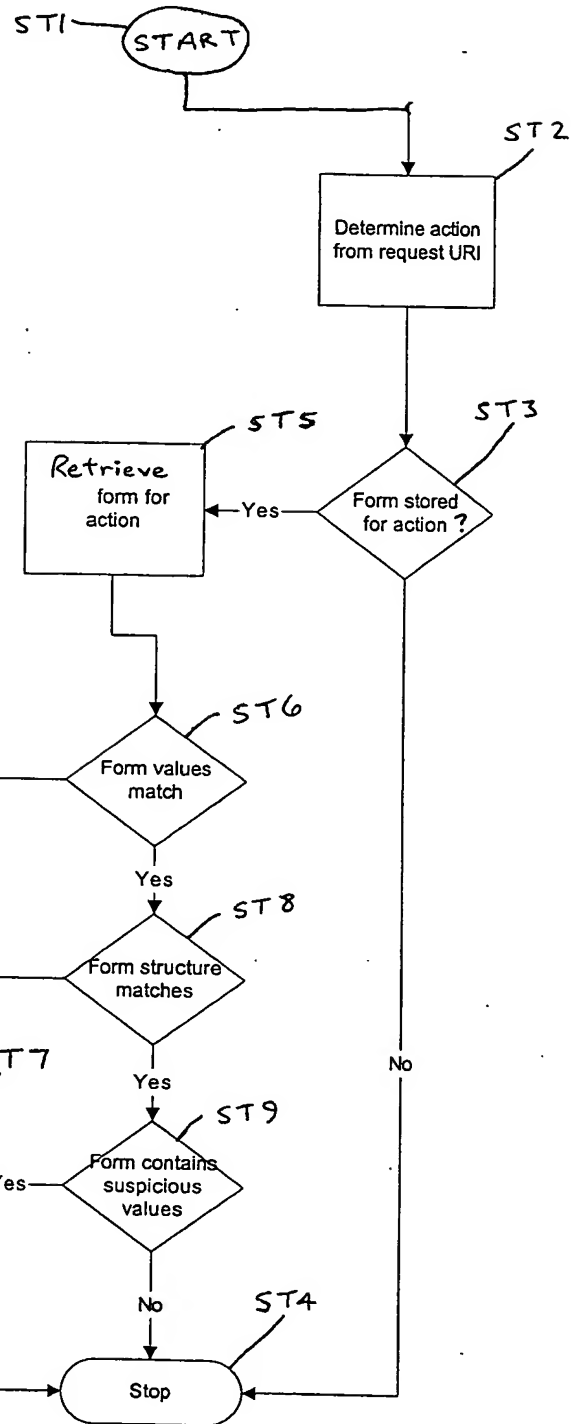


FIG. 35

3500

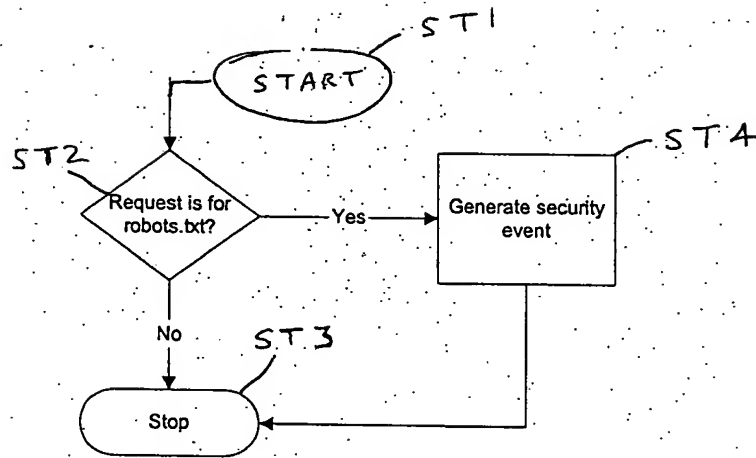


FIG. 36

3600
↓

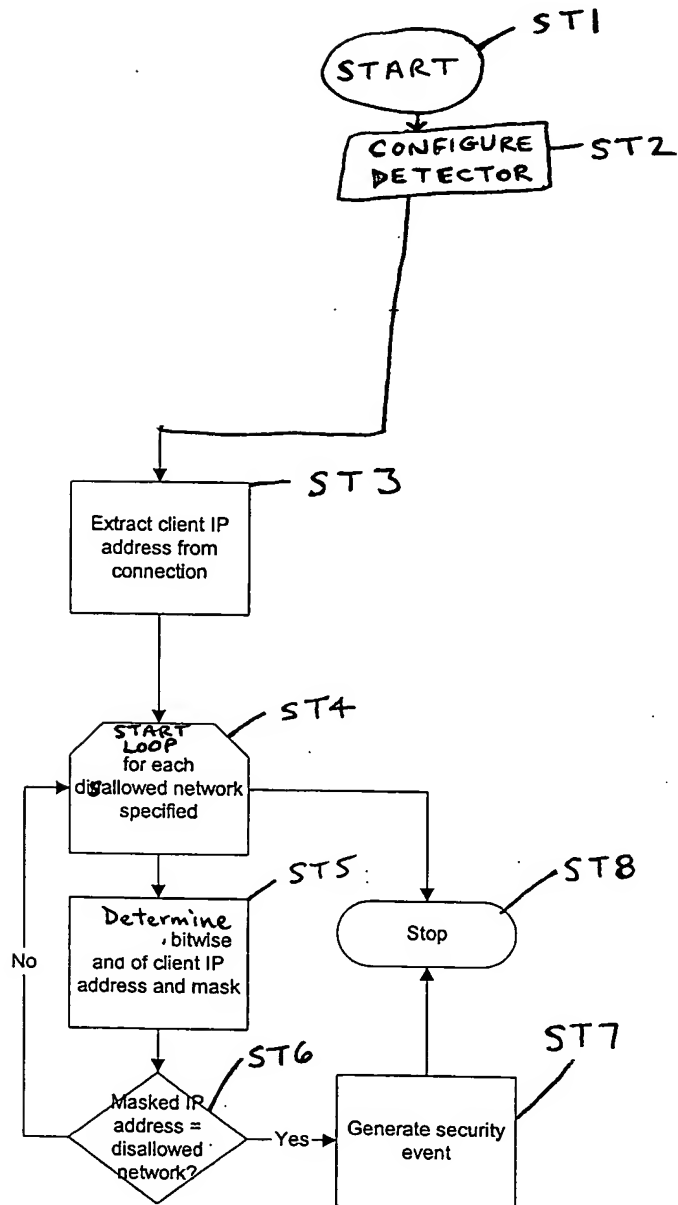


FIG. 37

3700
↓

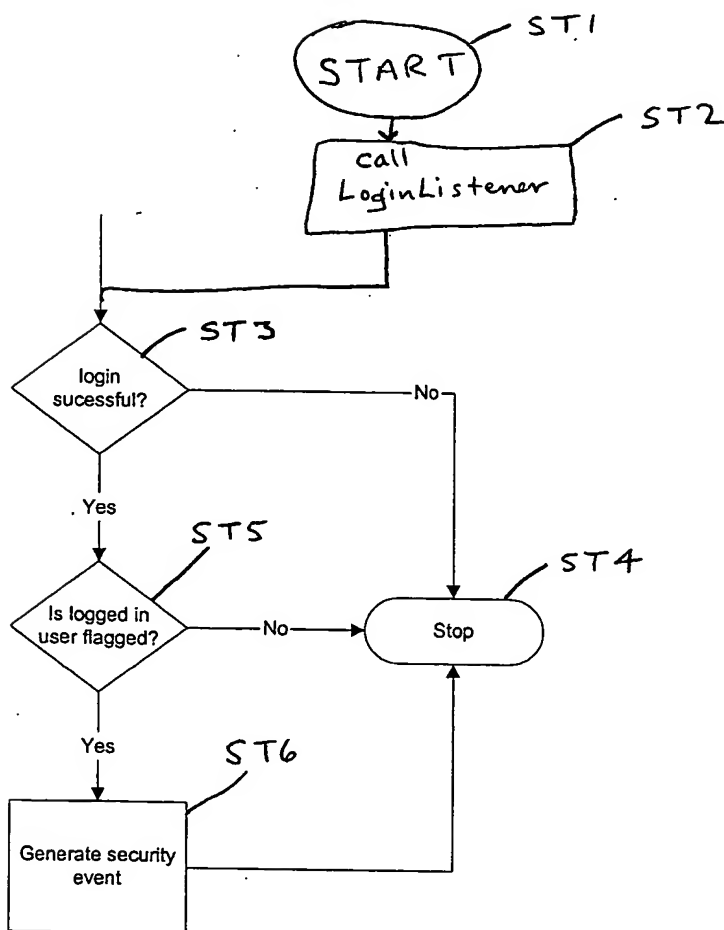


FIG. 38

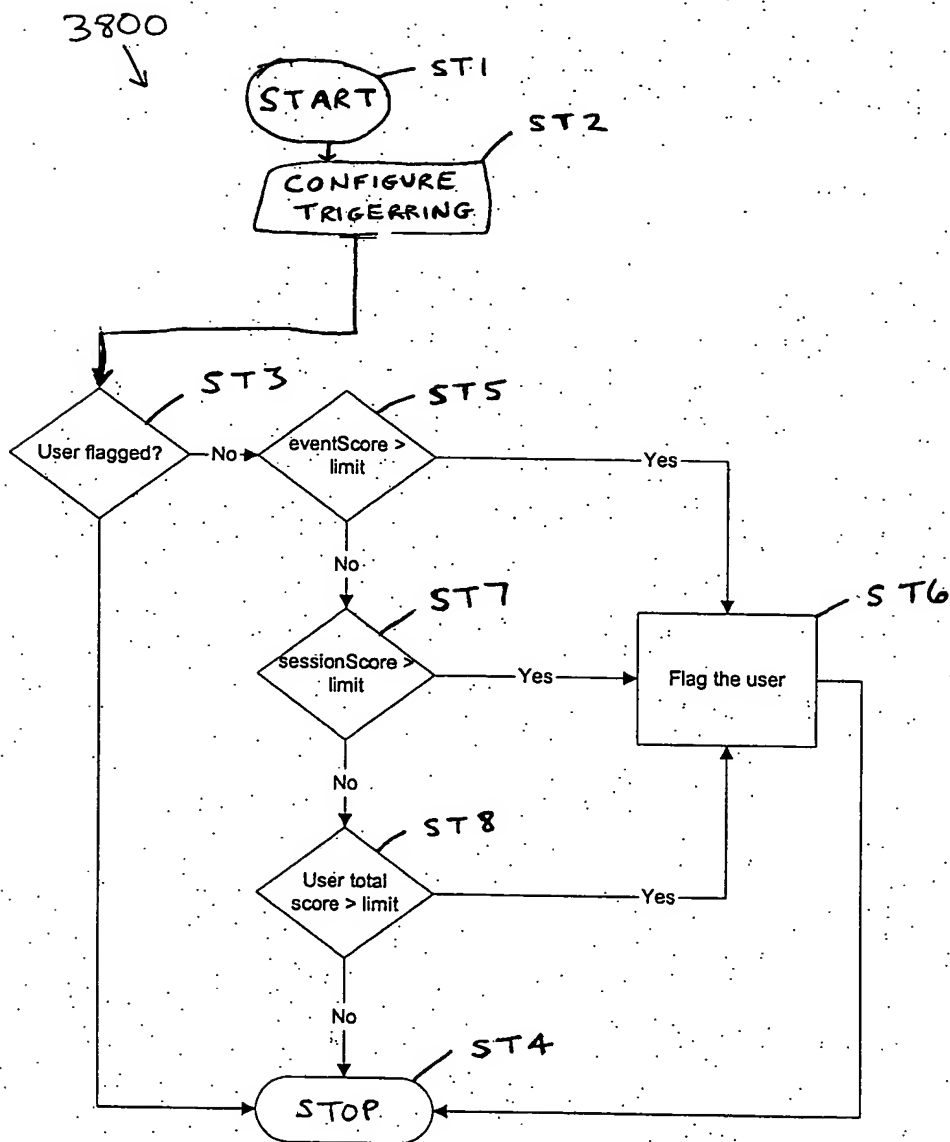
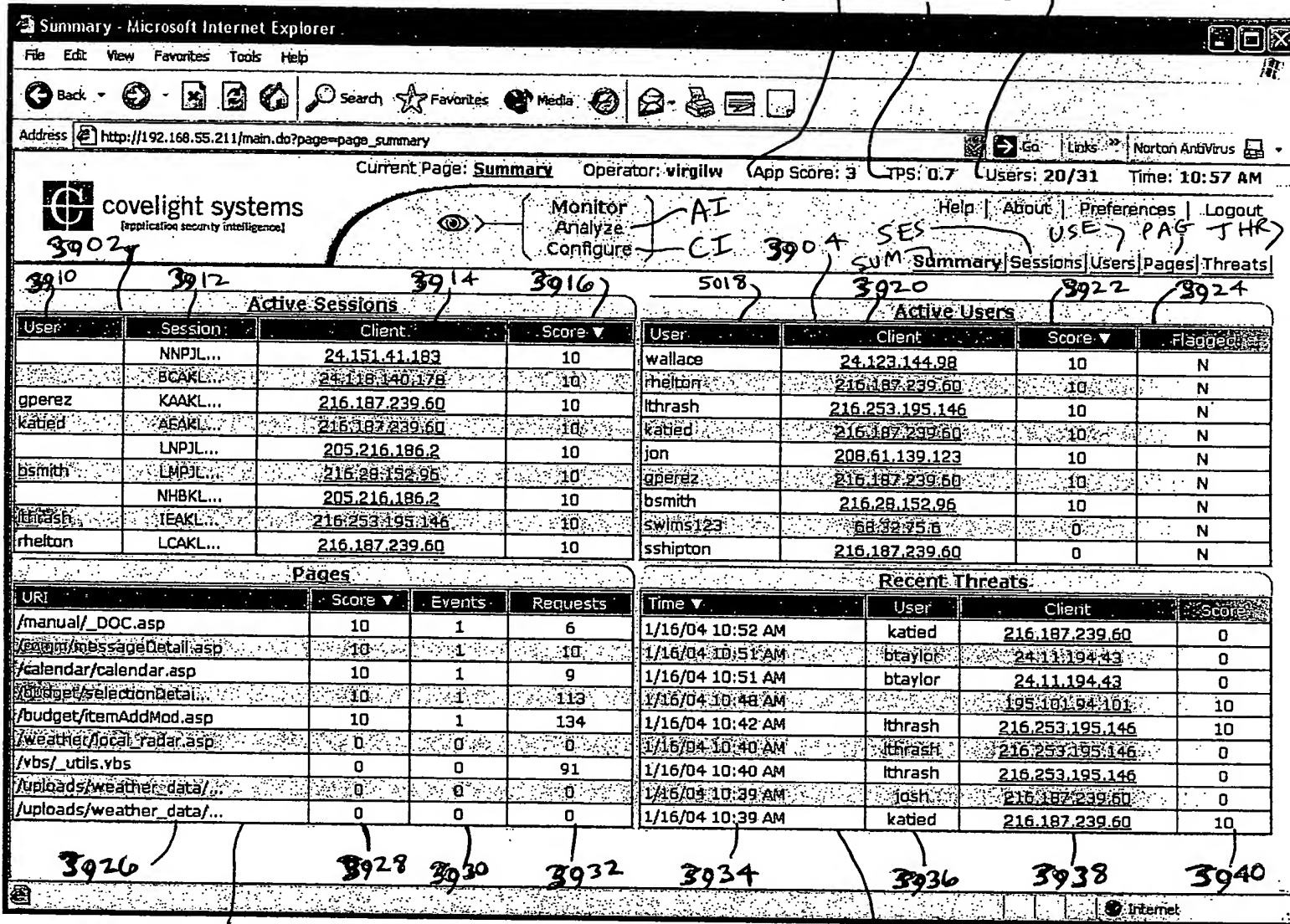


FIG.
39

APPS TPS USER

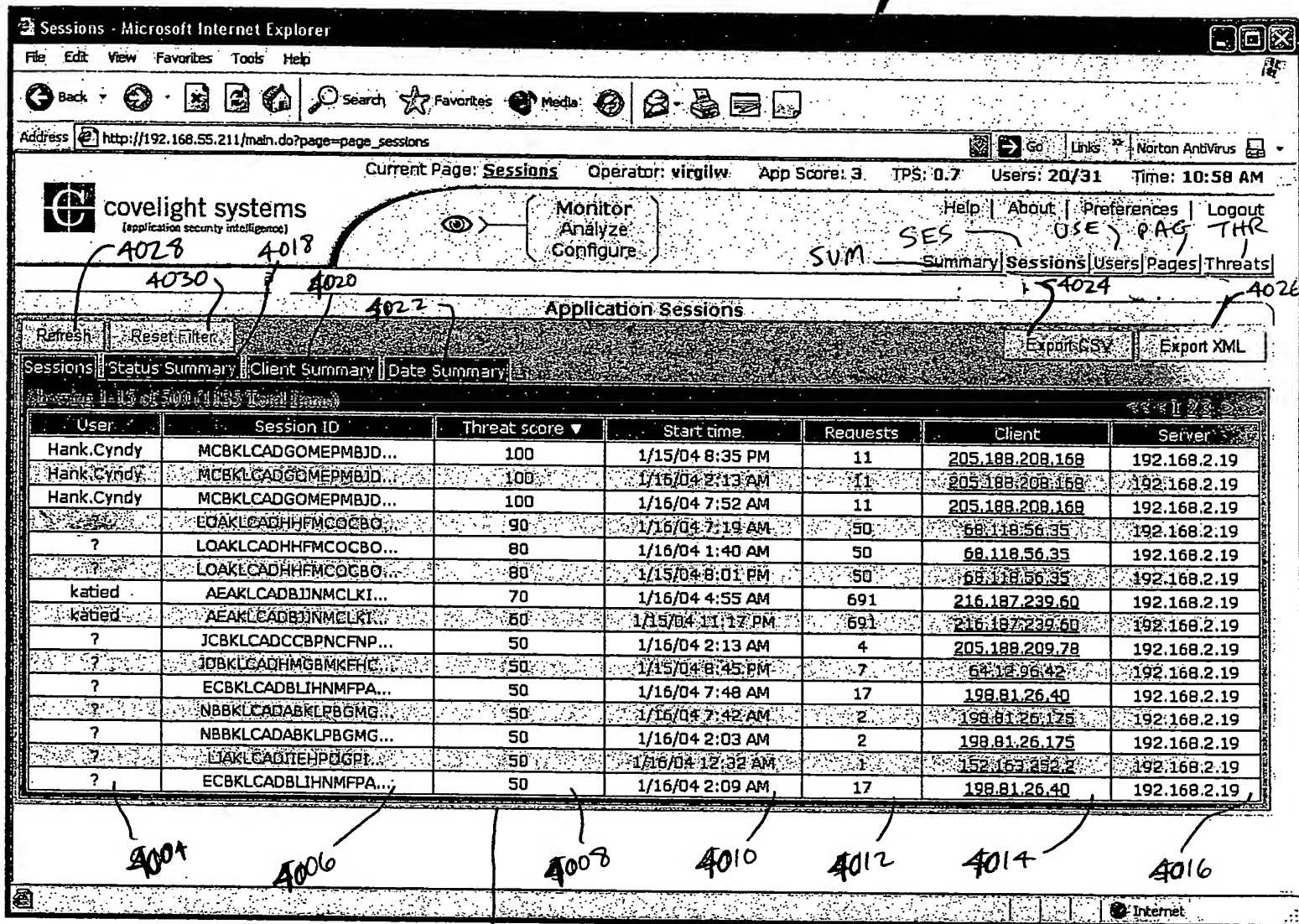


3906

3908

FIG.
40A

4000



4002

FIG. 40B

4032

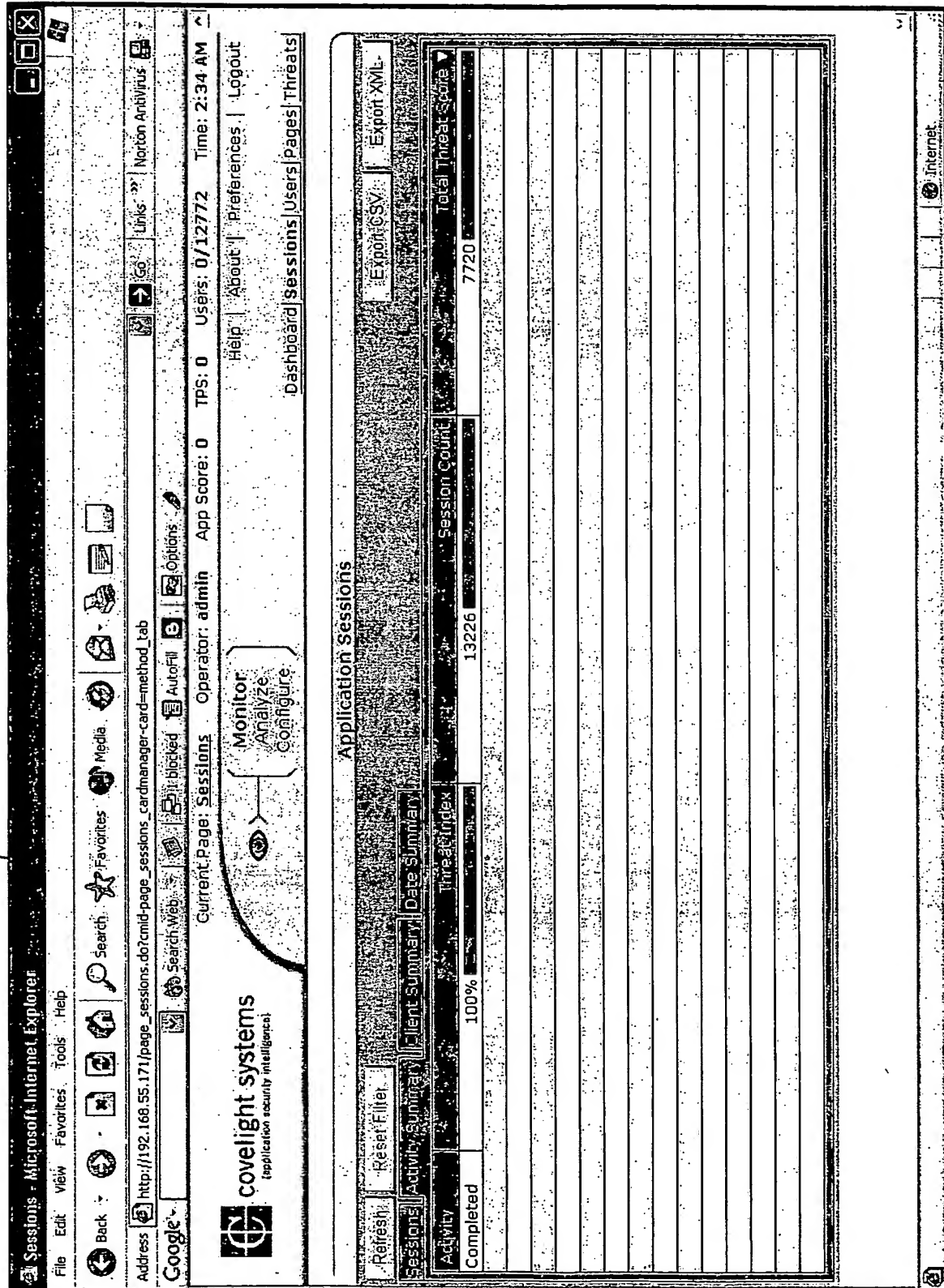


FIG. 40C

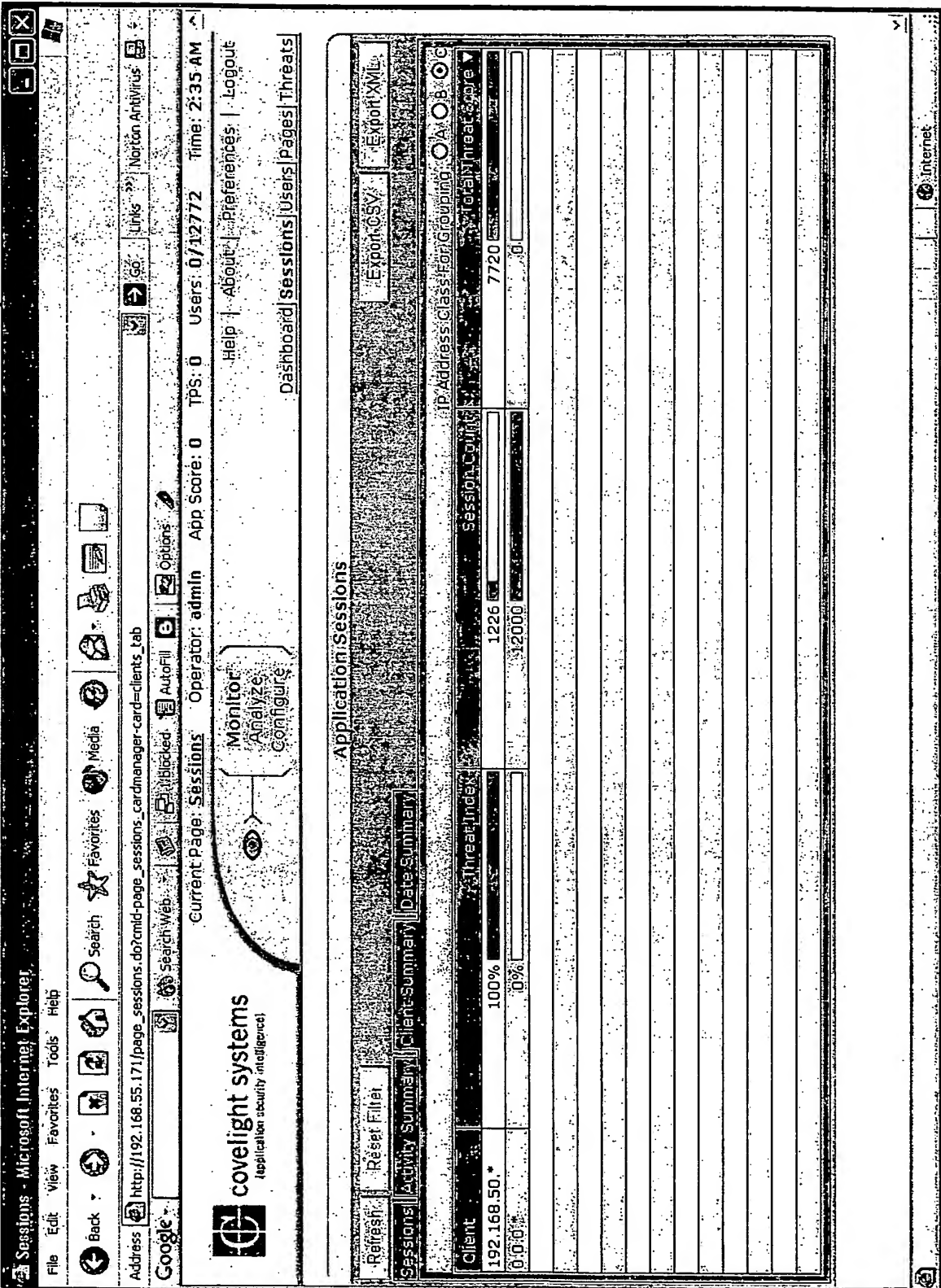


FIG. 40D
4036

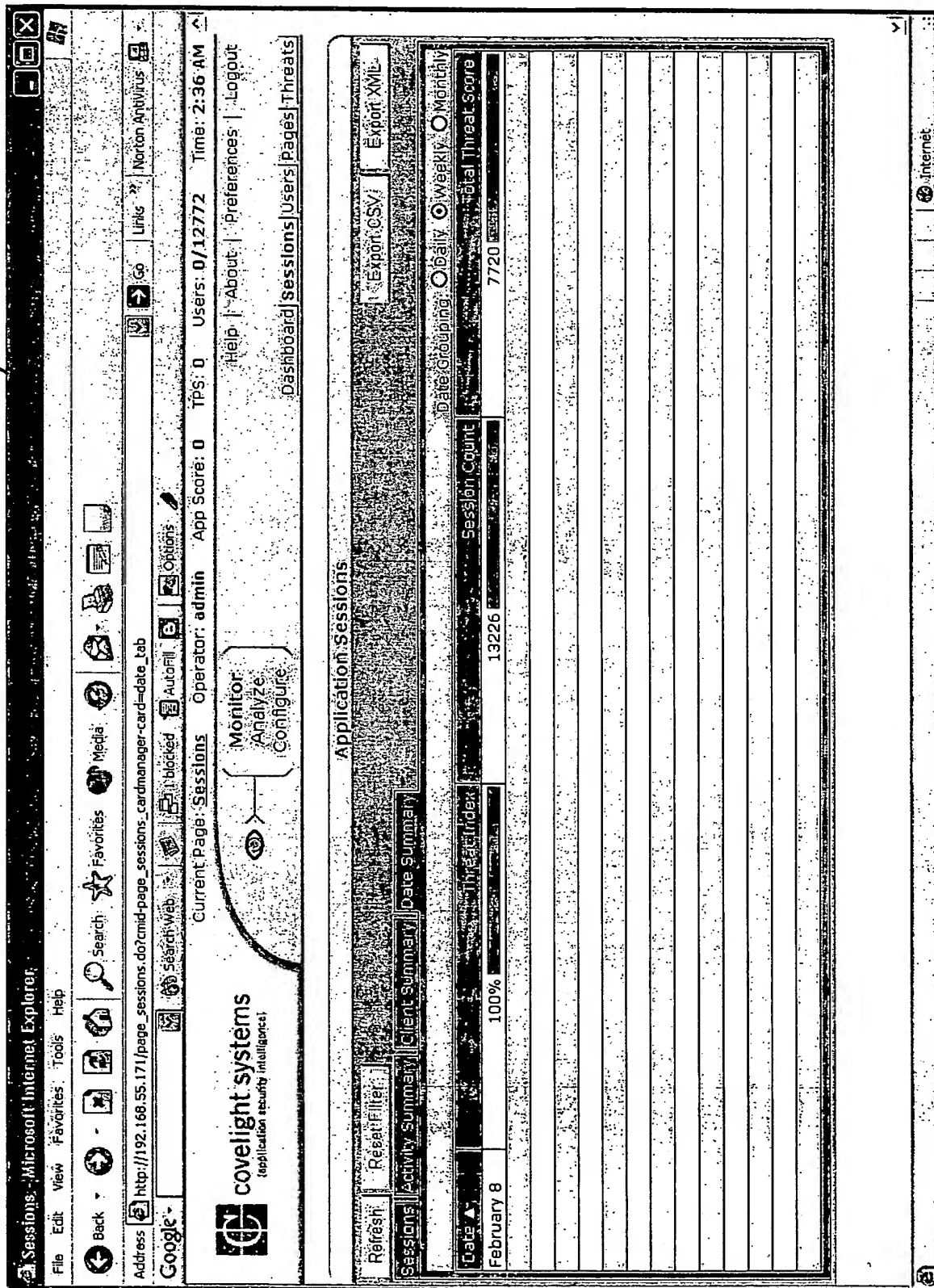


FIG.

41

4100


Session Detail - Microsoft Internet Explorer


File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media Print Mail News RSS Feeds

Address http://192.168.55.211/page_sessions.do?rowlink=1074216912834120&tableid=page_sessions_table Go Links Norton AntiVirus

Current Page: [Sessions](#) / [Session Detail](#) Operator: virgilw App Score: 3 TPS: 0.4 Users: 20/31 Time: 11:04 AM

 covelight systems
(application security intelligence)

 Monitor Analyze Configure

Help | About | Preferences | Logout

SUM SES USE PAG THR
Summary Sessions Users Pages Threats

Session Detail

Session: NGBKLCADGOMEPMBJDNINCAEON 1/500: Next>	
User: Hank.Cyndy (Search)	Login Method: Login Form
Start Time: 1/15/04 8:35 PM	Last Accessed Time: 1/15/04 8:36 PM
Client IP Address: 205.188.208.168 (Search)	Server IP Address: 192.168.2.19
Session Threat Score: 100	Request Count: 11
Threats: 4	
View Transactions	View Threats

Done Internet

4102

4104

FIG.

4200

42

Users - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail News RSS

Address http://192.168.55.211/main.do?page=page_users Go Links Norton Antivirus

Current Page: **Users** Operator: virgilw App Score: 3 TPS: 0.5 Users: 20/31 Time: 10:58 AM

covelight systems
(application security intelligence)

Monitor Analyze Configure

Help | About | Preferences | Logout

SUM7 SES USE PAG THR
Summary Sessions Users Pages Threats

Application Users

Refresh Reset Filter Export CSV Export XML

Users Flagged Summary Client Summary Last Login Summary

Showing 1-13 of 31 (31 Total Items)

	User	Current Score	Max Score	Total Score	Total Requests	Avg Requests	Client	Flagged
<input type="checkbox"/>	wallace	10	10	50	82	13	24.123.144.98	N
<input type="checkbox"/>	rhelton	10	20	40	60	20	216.187.239.60	N
<input type="checkbox"/>	lthrash	10	30	100	520	57	216.253.195.146	N
<input type="checkbox"/>	katied	10	70	80	1382	172	216.187.239.60	N
<input type="checkbox"/>	jon	10	25	50	888	296	208.61.139.123	N
<input type="checkbox"/>	gperez	10	20	40	212	70	216.187.239.60	N
<input type="checkbox"/>	bsmith	10	20	40	258	86	216.28.152.96	N
<input type="checkbox"/>	swims123	0	10	20	124	41	68.32.75.6	N
<input type="checkbox"/>	sshington	0	10	20	36	12	216.187.239.60	N
<input type="checkbox"/>	sdarden	0	10	20	78	26	198.143.244.44	N
<input type="checkbox"/>	scavender	0	10	30	15	5	216.187.239.60	N
<input type="checkbox"/>	rwarburton	0	40	160	506	46	216.187.239.60	N
<input type="checkbox"/>	mtaylor	0	20	50	598	149	66.180.103.154	N

Reset Delete Search

Internet

4204

4206

4208

4210

4212

4214

4216

4218

4202

FIG. 43

4300


Users - Microsoft Internet Explorer


File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media Print Mail

Address http://192.168.55.211/page_users.do?rowlink=wallace&tableindex=0&tableid=page_users_table Go Links Norton AntiVirus

Current Page: **Users / User Detail** Operator: virgilw App Score: 3 TPS: 0.2 Users: 20/31 Time: 11:05 AM

 **covelight systems**
(application security intelligence)

 **Monitor**
Analyze
Configure

Help | About | Preferences | Logout

Summary | Sessions | Users | Pages | Threats

User Detail

User: **wallace** 1/31 Next >

Current Threat Score:	10	Last Login Time:	1/16/04 9:33 AM
Average Session Score:	8	Longest Session Duration:	1m 36s
Highest Session Score:	10	Average Session Duration:	52 s
Total Threat Score:	50	Total Session Time:	5m 13s
Total Threat Count:	11	Last Client IP Address:	24.123.144.98 (Search)
Total HTTP Requests:	82	Last Server IP Address:	192.168.2.19
Average HTTP Requests Per Session:	13	Active Sessions:	2
Last Reset:	Never	Total Sessions:	6

[View Transactions](#) [View Threats](#)

Flagged: ☐ Notes:

Done Internet

4302

4304

Title: METHODS, SYSTEMS AND COMPUTER
PROGRAM PRODUCTS FOR
MONITORING PROTOCOL RESPONSES
FOR A SERVER APPLICATION

Atty Docket: 1503/9

FIG.

44

4400

Pages - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address http://192.168.55.211/mah.do?page=page_nodes

Current Page: **Pages** Operator: virgilw App Score: 3 TPS: 0.5 Users: 20/31 Time: 10:58 AM

covelight systems
[application security intelligence]

Monitor Analyze Configure

Help | About | Preferences | Logout

Summary Sessions Users Pages Threats

Application Pages

Refresh Reset Filter Export CSV Export XML

Pages | Flagged Summary | Content-Type Summary | Last Accessed Summary

Showing 1-10 of 252 (253 Total) Items

Page	Current Score	Average Score	Threat Count	Request Count	Avg Requests	Page Size
<input type="checkbox"/> /manual/_DOC.asp	10	1	1	6	184	N
<input type="checkbox"/> /comm/messageDetail.asp	10	2	1	10	1140	N
<input type="checkbox"/> /calendar/calendar.asp	10	26	1	9	158	N
<input type="checkbox"/> /budget/selectionDetail.asp	10	3	1	113	3839	N
<input type="checkbox"/> /budget/itemAddMod.asp	10	1	1	134	1696	N
<input type="checkbox"/> /weather/local_radar.asp	0	0	0	0	0	N
<input type="checkbox"/> /vbs/_utils.vbs	0	0	0	91	1	N
<input type="checkbox"/> /uploads/weather_data/icons/88.gif	0	0	0	0	0	N
<input type="checkbox"/> /uploads/weather_data/icons/87.gif	0	0	0	0	0	N
<input type="checkbox"/> /uploads/weather_data/icons/85.gif	0	0	0	5	0	N

Delete Selected Reset All Search

Last Reset Never

Current Interval Ends At: 1/16/04 11:00 AM

Internet

4428

4430

4412 4414

FIG.

45

4500


Page Detail - Microsoft Internet Explorer


File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address http://192.168.55.211/page_nodes.do?rowlink=%2Fmanual%2F_DOC.asp&tableindex=0&tableid=page_nodes_table Go Links Norton AntiVirus

Current Page: **Pages / Page Detail** Operator: virgilw App Score: 3 TPS: 1.2 Users: 20/31 Time: 11:05 AM

 **covelight systems**
(application security intelligence)

 **Monitor**
Analyze
Configure

Help | About | Preferences | Logout

SUM **SES** **USE** **PAG** **THR**
Summary | Sessions | Users | Pages | Threats

Page Detail

Page: /manual/_DOC.asp 1/252 Next>

Content-Type: text/html (Search)	Max Interval Score: 10
Total Score: 30	Interval Score: 0
Total Threat Count: 3	Interval Threat Count: 0
Total Request Count: 88	Interval Request Count: 0
Average Score: 1	Average Response Time: 0
Interval Count: 19	Previous Interval Score: 10
Last Accessed: 1/16/04 10:16 AM	

[View Transactions](#) [View Threats](#) Flagged: ☐ Apply

Last Reset: Never
Current Interval Ends At: 1/16/04 12:00 PM

Done Internet

4502

4504

FIG.
46A

4600

Threats - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media Print Mail

Address http://192.168.55.211/main.do?page=page_events Go Links Norton AntiVirus

Current Page: Threats Operator: virgilw App Score: 3 TPS: 0.5 Users: 20/31 Time: 10:58 AM

covelight systems
[application security intelligence]

4618 4620 4622 4626 SUM SES USE PAG THR
Summary Sessions Users Pages Threats

4624 Threats 4628 4630

Refresh Reset Filter Export CSV Export XML

Threats Detector Summary Page Summary Client Summary Server Summary Date Summary

Showing 1-15 of 104 (104 Total Items)

Timestamp	Score	Detector	Request URI	User	Flagged	Client
1/15/04 11:53 PM	20	Simultaneous login	/project/project.asp	rwarburton	N	216.187.239.60
1/15/04 11:45 PM	10	Login time does not match acceptable window	/auth/login.asp	rwarburton	N	65.140.140.189
1/15/04 11:45 PM	0	User login	/auth/login.asp	rwarburton	N	65.140.140.189
1/15/04 11:35 PM	10	Login time does not match acceptable window	/auth/login.asp	katied	N	216.187.239.60
1/15/04 11:35 PM	0	User login	/auth/login.asp	katied	N	216.187.239.60
1/15/04 11:33 PM	10	Login time does not match acceptable window	/auth/login.asp	btaylor	N	24.11.194.43
1/15/04 11:33 PM	0	User login	/auth/login.asp	btaylor	N	24.11.194.43
1/15/04 11:33 PM	10	Login time does not match acceptable window	/auth/login.asp	btaylor	N	24.11.194.43
1/15/04 11:33 PM	0	User login	/auth/login.asp	btaylor	N	24.11.194.43
1/15/04 11:31 PM	10	Web crawler	/robots.txt	?	N	195.101.94.101
1/15/04 11:23 PM	10	Login time does not match acceptable window	/auth/login.asp	lthrash	N	216.253.195.146
1/15/04 11:23 PM	0	User login	/auth/login.asp	lthrash	N	216.253.195.146
1/15/04 11:23 PM	10	Login time does not match acceptable window	/auth/login.asp	lthrash	N	216.253.195.146
1/15/04 11:23 PM	0	User login	/auth/login.asp	lthrash	N	216.253.195.146
1/15/04 11:22 PM	10	Login time does not match acceptable window	/auth/login.asp	josh	N	216.187.239.60

4604 4606 4608 4610 Internet 4612 4614 4616

FIG. 46B

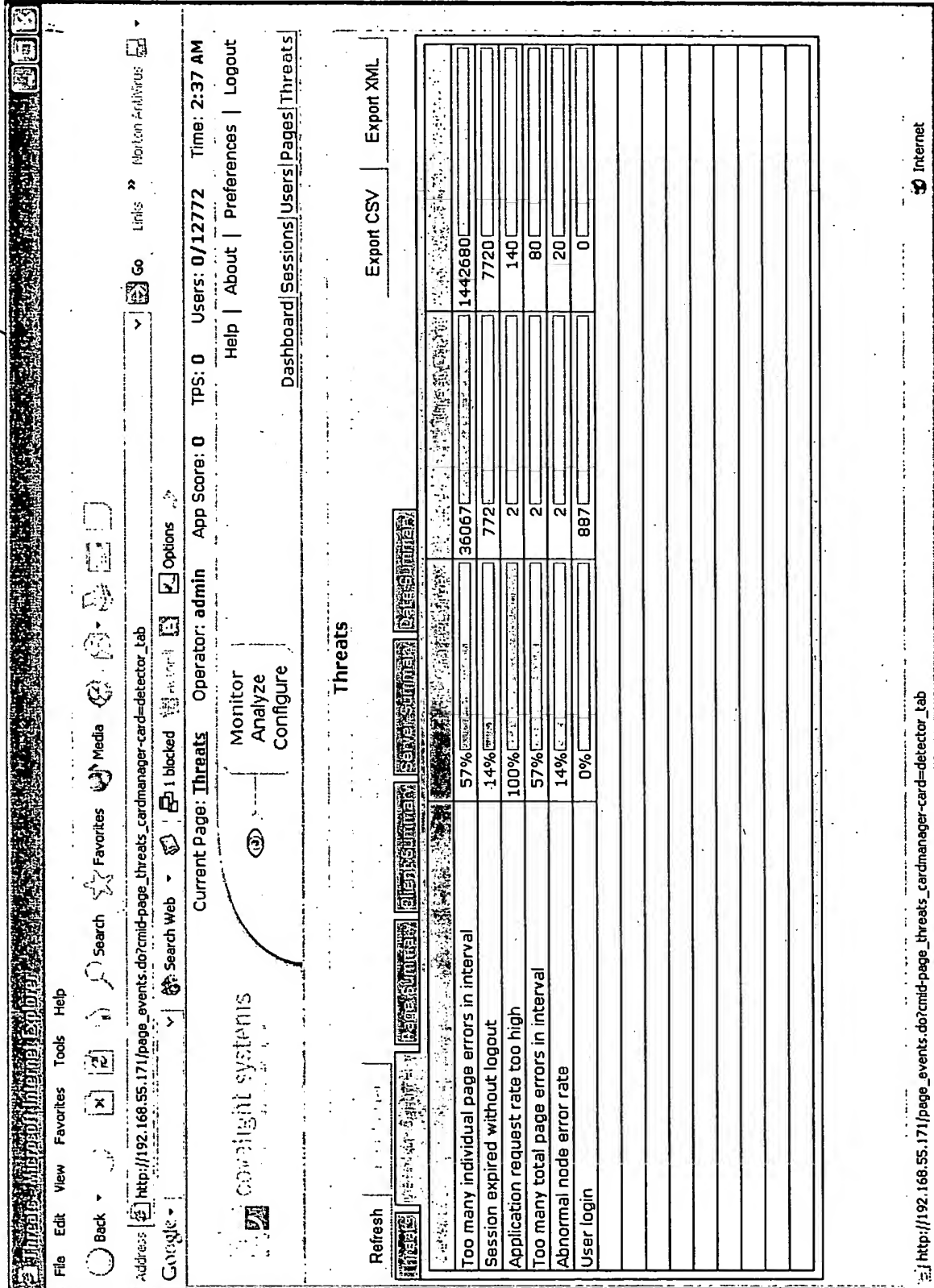


FIG. 46C



4636

FIG. 46D

The screenshot displays a web application interface for monitoring protocol responses. The interface includes a navigation bar at the top with links for Dashboard, Sessions, Users, Pages, and Threats. Below the navigation bar, there is a section for 'Current Page: Threats' with sub-links for Monitor, Analyze, and Configure. The main content area features a table titled 'IP Address Class For Grouping' with columns for IP, Count, and Percentage. The table shows two entries: 0.0.0.* with a count of 36073 and 100%, and 192.168.50.* with a count of 1659 and 11%. The interface also includes a search bar, a 'Go' button, and a 'Done' button at the bottom right.

IP	Count	Percentage
0.0.0.*	36073	100%
192.168.50.*	1659	11%

4638



FIG. 46F 4640

Internet Explorer

File Edit View Favorites Tools Help

Back

Forward

Search

Favorites

Media

Options

Address

http://192.168.55.171/page_events.do?mid-page_threats_cardmanager-card=date_tab

Go

Links

Home

Recent

History

Bookmarks

Feeds

Internet Options

Google

Search Web

1 blocked

Current Page: Threats

Operator: admin

App Score: 0

TPS: 0

Users: 0/12772

Time: 2:39 AM

Help

About

Preferences

Logout

Dashboard

Sessions

Users

Pages

Threats

copyright systems

Monitor

Analyze

Configure

Threats

Refresh

Export CSV

Export XML

February 8

100%

37732

1450640

Date Grouping:

Daily

Weekly

Monthly

Done

Internet

Title: METHODS, SYSTEMS AND COMPUTER
PROGRAM PRODUCTS FOR
MONITORING PROTOCOL RESPONSES
FOR A SERVER APPLICATION

Atty Docket: 1503/9

FIG.

4700 47


Threat Detail - Microsoft Internet Explorer


File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media Print Mail

Address http://192.168.55.211/page_events.do?rowlink=1074226788814103&tableindex=0&tableid=page_threats_table Go Links Norton AntiVirus

Current Page: Threats / Event Detail Operator: virgilw App Score: 3 TPS: 0.4 Users: 20/31 Time: 11:06 AM

 **covelight systems**
(application security intelligence)

 Monitor Analyze Configure

Help | About | Preferences | Logout

SUM SES USE PAG THR
Summary Sessions Users Pages Threats

Threat Detail

1/104 Next>

Timestamp:	1/15/04 11:53 PM
Threat score:	20
Detector:	Simultaneous login (Search)
Description:	User is logged in twice on different sessions
Request URI:	/project/project.asp (Search)
User:	rwarburton (Search)
Flagged:	<input type="checkbox"/>
Session ID:	LDAKLCADCGLHMKMICHJKHPLO (Search)
Client IP address:	216.187.239.60 (Search)
Server IP address:	192.168.2.19:80 (Search)

Internet

FIG. 48

4800

Transactions - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://192.168.55.211/main.do?page=page_bns

Current Page: **Transactions** Operator: virgilw App Score: 3 TPS: 0.2 Users: 20/31 Time: 11:00 AM

covelight systems (application security intelligence)

Monitor Analyze Configure MI AI CE

Help About Preferences Logout

4822 4824 4826 4828 Transactions 4830 4832 4834 4836 4838

Refresh Reset Filter Export CSV Export XML

Transactions Method Summary Client Summary Page Summary Status Summary Content-Type Summary Server Summary Date Summary

Showing 1-15 of 1000 (2000 total items)

Method	URI	User	Status	Content Length	Content Type	Threat Score	Timestamp	Response Time
GET	/	?	302	135	text/html	0	1/16/04 11:00 AM	6
GET	/images/addloc.gif	?	200	1664	image/gif	0	1/16/04 11:00 AM	2
GET	/images/additem.gif	?	200	1529	image/gif	0	1/16/04 11:00 AM	0
GET	/images/selectsum.gif	?	200	2079	image/gif	0	1/16/04 11:00 AM	0
GET	/images/rt_tabnotch.gif	?	200	49	image/gif	0	1/16/04 11:00 AM	0
GET	/images/rt_tabnotch.gif	?	200	48	image/gif	0	1/16/04 11:00 AM	0
GET	/images/s.gif	?	200	43	image/gif	0	1/16/04 11:00 AM	0
GET	/js/menu.js	?	200	897	application/x-javascript	0	1/16/04 11:00 AM	0
GET	/vbs/_utils.vbs	?	200	956	text/vbscript	0	1/16/04 11:00 AM	0
GET	/js/modal.js	?	200	421	application/x-javascript	0	1/16/04 11:00 AM	0
GET	/js/util.js	?	200	5608	application/x-javascript	0	1/16/04 11:00 AM	3
GET	/js/_const.js	?	200	200	application/x-javascript	0	1/16/04 11:00 AM	0
GET	/include/builder_styles/stylemain.css	?	200	12924	text/css	0	1/16/04 11:00 AM	0
GET	/budget/itemaddmod.asp	jon	200	5488	text/html	0	1/16/04 11:00 AM	199
GET	/budget/selectionDetail.asp	jon	200	10454	text/html	0	1/16/04 11:00 AM	2026

Internet

4804

4802

4806

4808

4810

4812

4814

4816

4818

4820

Title: METHODS, SYSTEMS AND COMPUTER
PROGRAM PRODUCTS FOR
MONITORING PROTOCOL RESPONSES
FOR A SERVER APPLICATION

Atty Docket: 1503/9

FIG. 49

4900


Transaction Detail - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Mail Print

Address http://192.168.55.211/page_bns.do?rowlink=107426881090039488&tableindex=18&tableid=page_bns_table Go Links Norton AntiVirus

Current Page: [Transactions](#) / [Transaction Detail](#) Operator: [virgilw](#) App Score: 3 TPS: 0.1 Users: 20/31 Time: 11:07 AM

 covelight systems
(application security intelligence)

[Monitor](#) [Analyze](#) [Configure](#)

[Help](#) | [About](#) | [Preferences](#) | [Logout](#)

[Transactions](#) | [Network](#)

Transaction Detail

Transaction: 107426881090038488 <Previous 19/1000 Next>

Timestamp:	1/16/04 11:00 AM	HTTP response:	302 (Search)
Method:	POST (Search)	Content Length:	175
URI:	/budget/ItemAddM od.asp (Search)	Content Type:	text/html (Search)
User:	? (Search)	Server Response Time:	2.8 s
Client IP Address:	66.180.103.154 (Search)	Server IP Address:	192.168.2.19:80 (Search)
Session ID:	? (Search)		

Name	Value
IngAttachmentsCount	0
chkInventory	0
IngEventId	
txtItemDesc	co.#3
blnNewItem	False
DeleteOneAttachment	
actionType	Save
strWebLink	
IngLocationId	650189281
IngOldProjectId	560003098
oldItemId	
itemId	501077459
txtItemInfo	
IngSelectionId	680062400

Done Internet

FIG.

50

5000

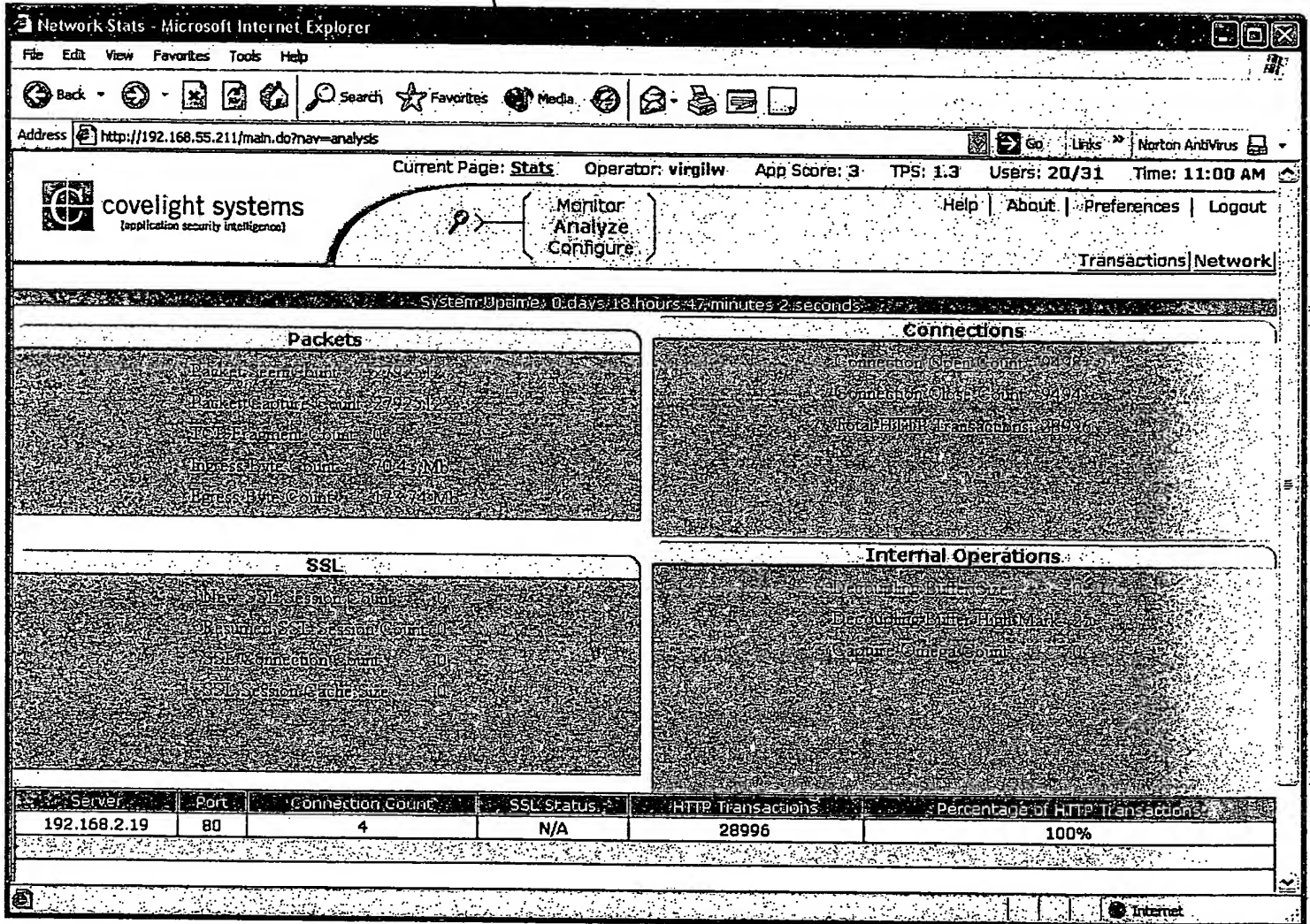


FIG. 51

5100


Preferences - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address http://192.168.55.211/main.do?page=page_appconfig Go Links Norton AntiVirus

Current Page: **Preferences** Operator: virgilw App Score: 3 TPS: 0.1 Users: 20/31 Time: 11:07 AM

 **covelight systems**
(application security intelligence)

Help | About | Preferences | Logout

Application | **Appliance** | Detection | Operators | Save Points

Change Password:

Existing Password:

New Password:

Confirm Password:

Apply

Interface Settings

Table Size:

Refresh Rate: ☒ Seconds

Apply

Internet

5102

5104

FIG. 52

5200


Appliance - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address http://192.168.55.211/page_sensorcfg.do?cmid-page_cfgappliance_cardmanager1-card=network_tab Go Links Norton AntiVirus

Current Page: **Appliance** Operator: virgilw App Score: 4 TPS: 0.3 Users: 20/31 Time: 11:10 AM

 **covelight systems**
(application security intelligence)

[Monitor](#) [Analyze](#) [Configure](#) [Help](#) [About](#) [Preferences](#) [Logout](#)

[Application](#) [Appliance](#) [Detection](#) [Operators](#) [Save Points](#)

[Control](#) [Network](#) [Time](#) [Firmware](#) [SMTP Server](#)

IP Address

Subnet Mask

Gateway

Primary DNS

Secondary DNS

Public ☒ HTTPS Port

Public ☒ HTTP Port

[Apply and Reboot Sensor](#)

Internet

5202

FIG. 53

5300

Appliance - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address http://192.168.55.211/page_sensorcfg.do?cmid-page_cfgappliance_cardmanager1-card-smtpserversettings_tab Go Links Norton AntiVirus

Current Page: **Appliance** Operator: virgilw App Score: 4 TPS: 1:7 Users: 23/31 Time: 11:28 AM

covelight systems
(application security intelligence)

Monitor
Analyze
Configure

Help | About | Preferences | Logout

Application | **Appliance** | Detection | Operators | Save Points

Control | Network | Time | Firmware | **SMTP Server**

SMTP Server:

Username:

Password:

From Name:

From Address:

Enable Hop-by-hop send: ☐

Apply

Internet

FIG. 54

5400


Appliance - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print Mail

Address http://192.168.55.211/page_sensorcfg.do?cmid-page_rfgappliance_cardmanager1-card=time_tab Go Links Norton AntiVirus

Current Page: **Appliance** Operator: virgilw App Score: 4 TPS: 1.2 Users: 20/31 Time: 11:11 AM

 **covelight systems**
(application security intelligence)

Help About Preferences Logout

Monitor Analyze Configure

Application | **Appliance** | Detection | Operators | Save Points

Control | **Network** | Time | Firmware | SMTP Server

Month/Day/Year Hours/Minutes Timezone

01 16 2004 11 11 Universal Time UCT

Set Time

Internet

5402

FIG. 55

.5500

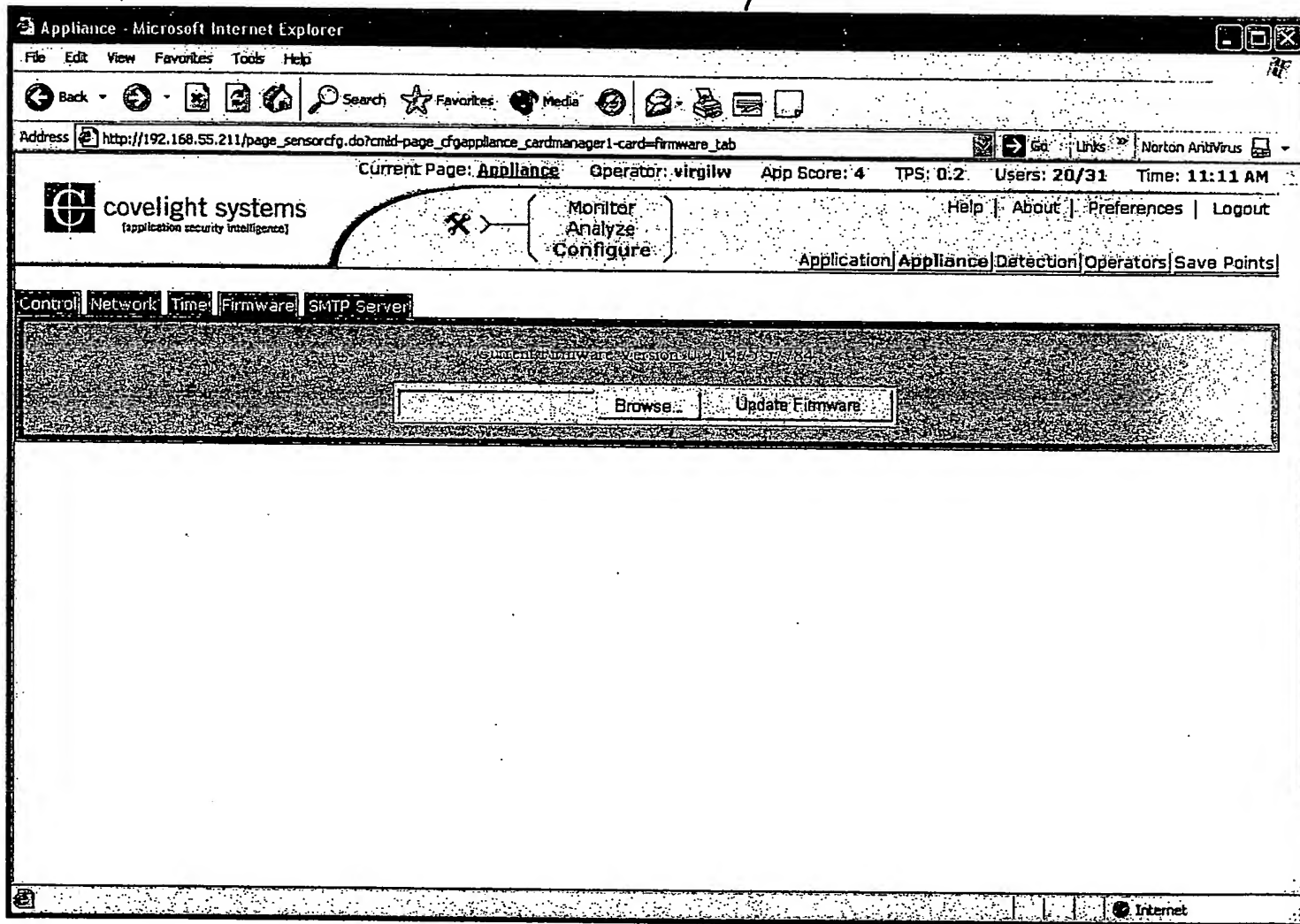


FIG. 56

5600

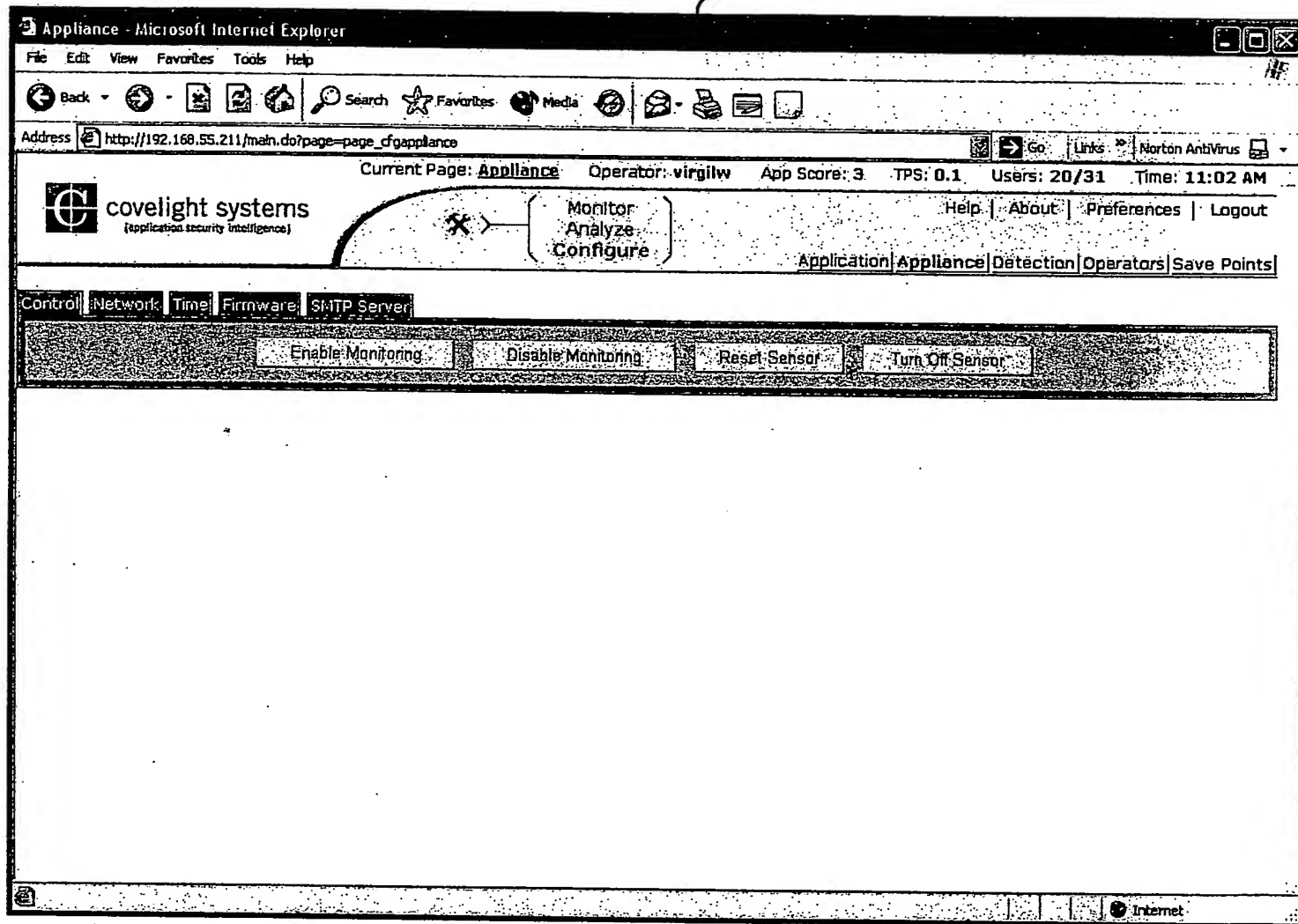


FIG. 57

5700

5702

5704

5706

FIG. 58

5800

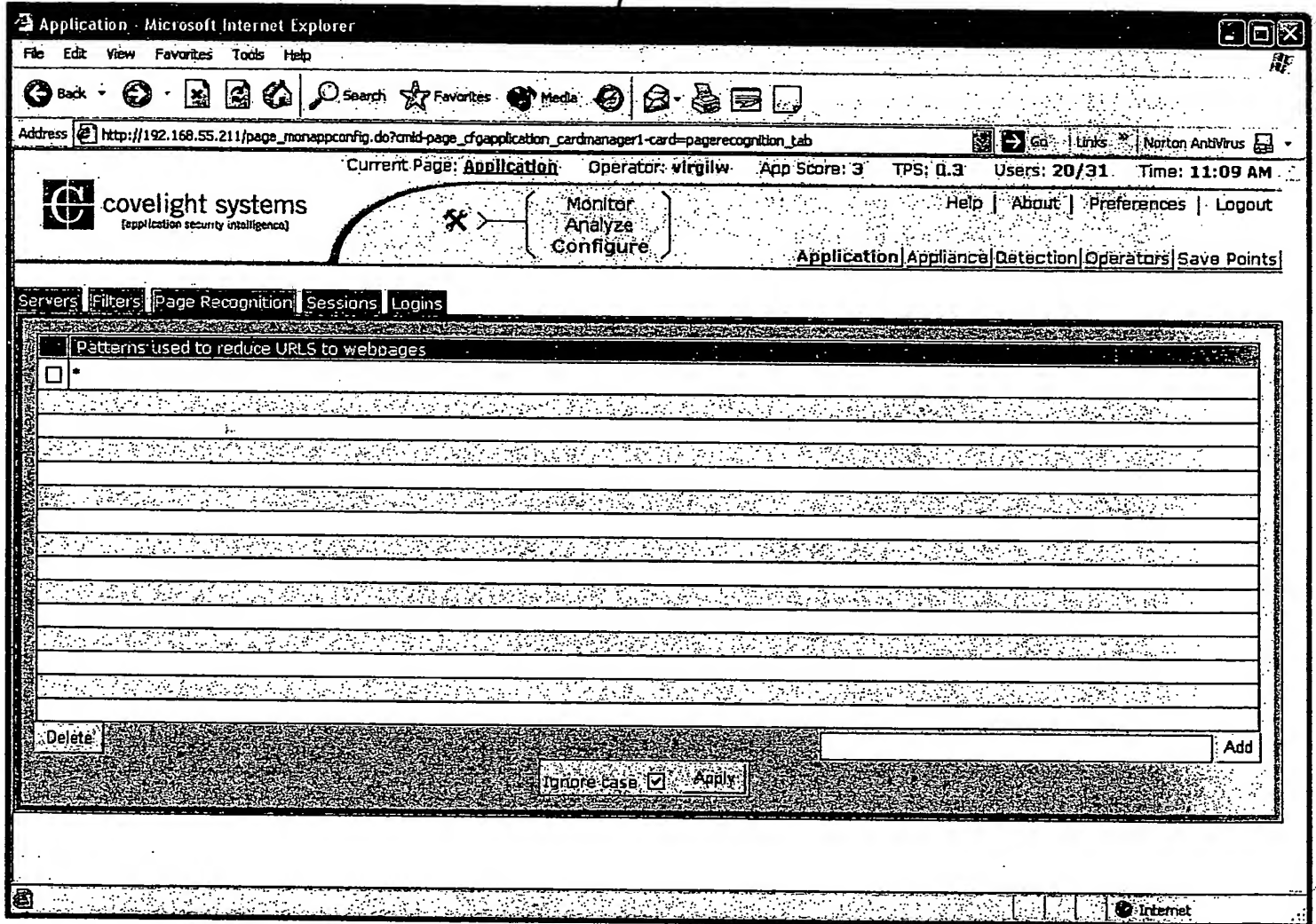


FIG. 59

5900


Application - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media

Address http://192.168.55.211/page_sessiondetectioncfg.do?mid-page_cfgapplication_cardmanager1-card=sessions_tab Go Links Norton AntiVirus

Current Page: **Application** Operator: virgilw App Score: 3 TPS: 0.2 Users: 20/31 Time: 11:09 AM

 **covelight systems**
(application security intelligence)

Help | About | Preferences | Logout

Monitor
Analyze
Configure

Application | Appliance | Detection | Operators | Save Points

Servers | Filters | Page Recognition | Sessions | Logins

Session Management

☐ Standard ASP Sessions
☐ Standard PHP Sessions
☐ Standard ASP Sessions
☐ Custom Sessions

Application Server Features

☐ Permissive Sessions
☐ Strict Sessions
Session timeout in minutes: 125
☒ Keepalive

Custom Settings

☒ Sessions are cookie based
Session cookie name:
☒ Include cookie name as approach
☐ Session ID may be included as a query argument in URLs
Name of query argument:
☐ Session ID may be included as a path parameter in URLs
Name of path parameter:

Internet

7002

1804

7000

FIG. 60

6000

Application - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address http://192.168.55.211/page_loginDetectionCfg.do?mid-page_cfgapplication_cardmanager1-card-logins_tab Go Links Norton AntiVirus

Current Page: **Application** Operator: virgilw App Score: 3 TPS: 0.2 Users: 20/31 Time: 11:10 AM

covelight systems
(application security intelligence)

Monitor Analyze Configure

Help | About | Preferences | Logout

Application | Appliance | Detection | Operators | Save Points

Servers | Filters | Page Recognition | Sessions | Logins

Form Based Login Detection

☒ Form based login

☐ Use case sensitive match

URL pattern of login action:

Form field contains user ID:

☐ Logout page detected

URL pattern of logout action:

Form Based Login Result

☐ Fail if login form is present and contains HTML text

☐ Fail if login response is detected and it follows the following URL pattern

☐ Fail if response HTML contains the following text

☐ Successful login response is detected and it follows the following URL pattern

☐ Successful response HTML contains the following text

☐ Successful login response generates a session

Internet

6002

6004

/

C 210

FIG. 63

6300

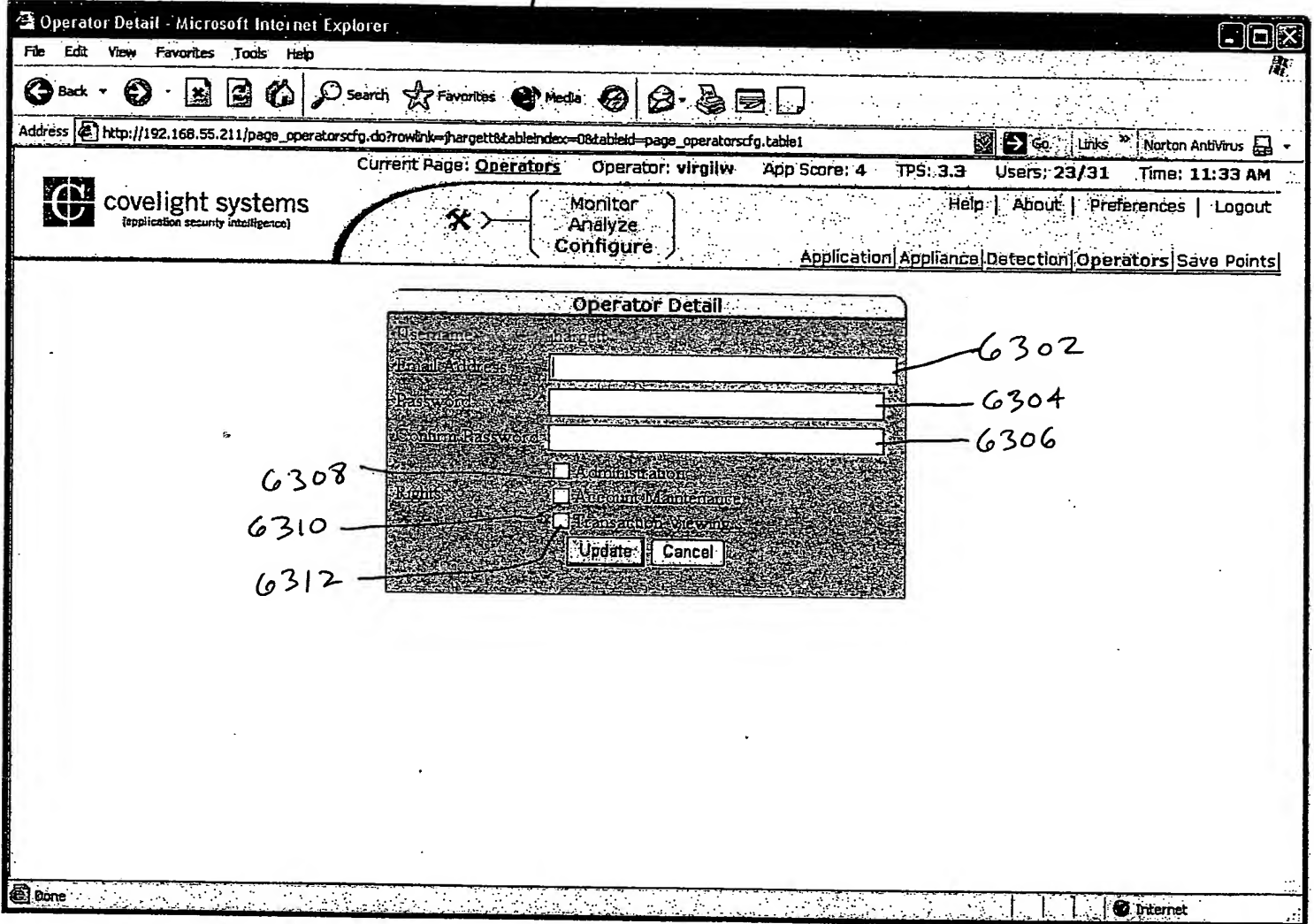
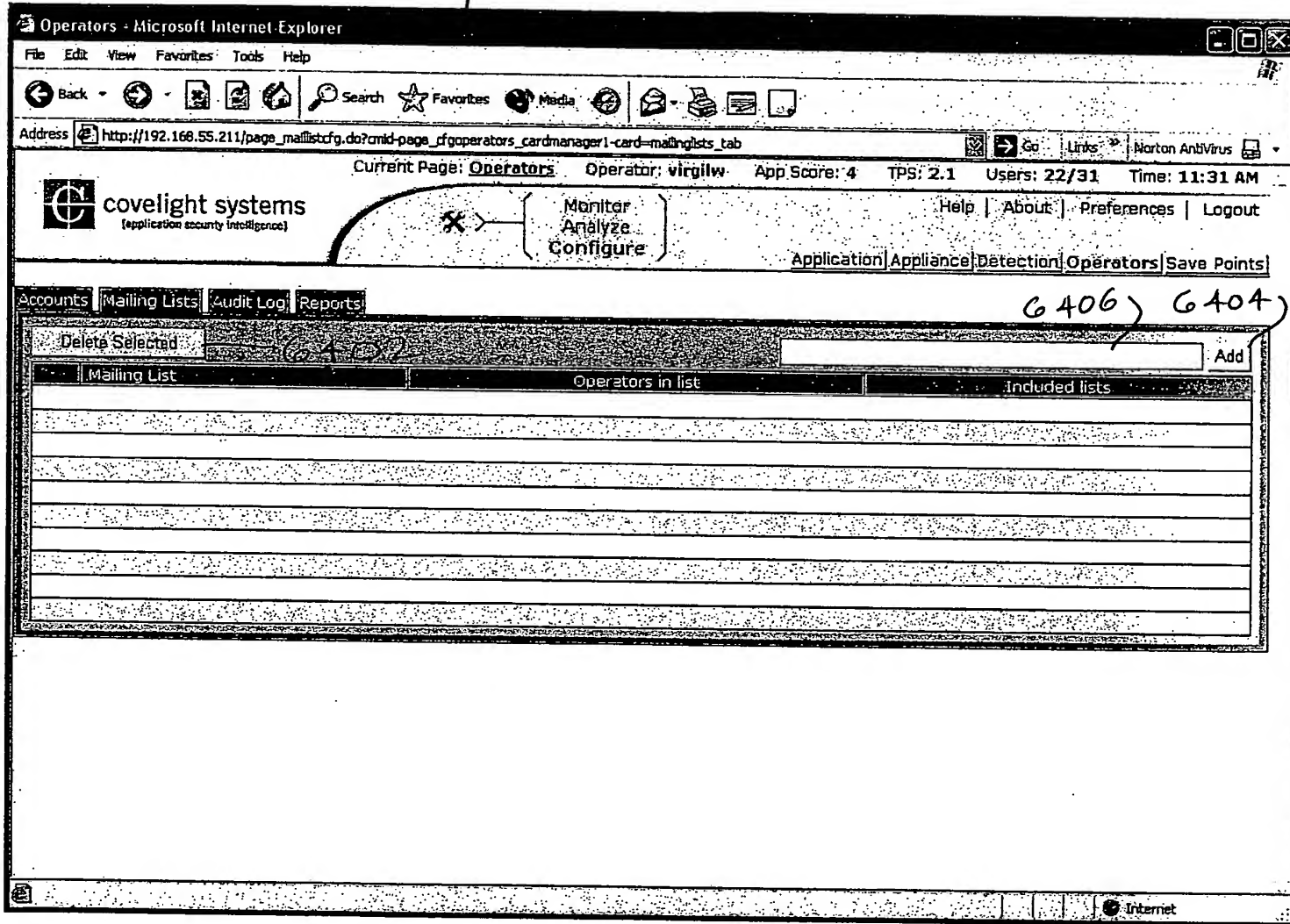


FIG. 64

6400



6406 } 6404

FIG. 65

6500

Operators - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media

Address http://192.168.55.211/page_operatorscfg.do?cmd=page_cfgoperators_cardmanager1-card=audilog_tab

Current Page: Operators Operator: virgilw App Score: 4 TPS: 2.9 Users: 22/31 Time: 11:32 AM

covelight systems (application security intelligence)

Monitor Analyze Configure

Help | About | Preferences | Logout

Application | Appliance | Detection | Operators | Save Points

Accounts | Mailing Lists | Audit Log | Reports

Refresh

Export CSV Export XML

Date	Message	IP Address	Operator
1/16/04 11:28 AM	Login successful	192.168.55.101	virgilw
1/16/04 10:57 AM	Login successful	192.168.55.101	virgilw
1/16/04 10:11 AM	Changed operator virgilw refresh rate to 30	192.168.55.17	virgilw
1/16/04 10:11 AM	Changed operator virgilw refresh rate to 30	192.168.55.17	virgilw
1/16/04 9:30 AM	Login successful	192.168.55.17	virgilw
1/16/04 9:27 AM	Login successful	192.168.55.17	virgilw
1/16/04 9:26 AM	Login successful	192.168.55.17	virgilw
1/16/04 8:47 AM	Login successful	65.81.86.237	dmdurrett
1/16/04 8:47 AM	Logout successful	65.81.86.237	dmdurrett
1/16/04 8:17 AM	Login successful	65.81.86.237	dmdurrett
1/16/04 7:37 AM	Login successful	65.81.86.237	dmdurrett
1/15/04 7:34 PM	Login successful	65.81.86.237	dmdurrett
1/15/04 7:34 PM	Login denied for admin	192.168.55.101	virgilw
1/15/04 7:14 PM	Login successful	192.168.55.101	?
1/15/04 6:34 PM	Login successful	192.168.55.101	virgilw
1/15/04 6:04 PM	Login successful	192.168.55.10	dmdurrett
1/15/04 5:46 PM	Login successful	65.81.86.166	jhargett
1/15/04 5:24 PM	Login successful	65.81.86.237	admin
		192.168.55.10	dmdurrett

Internet

FIG. 66

6600

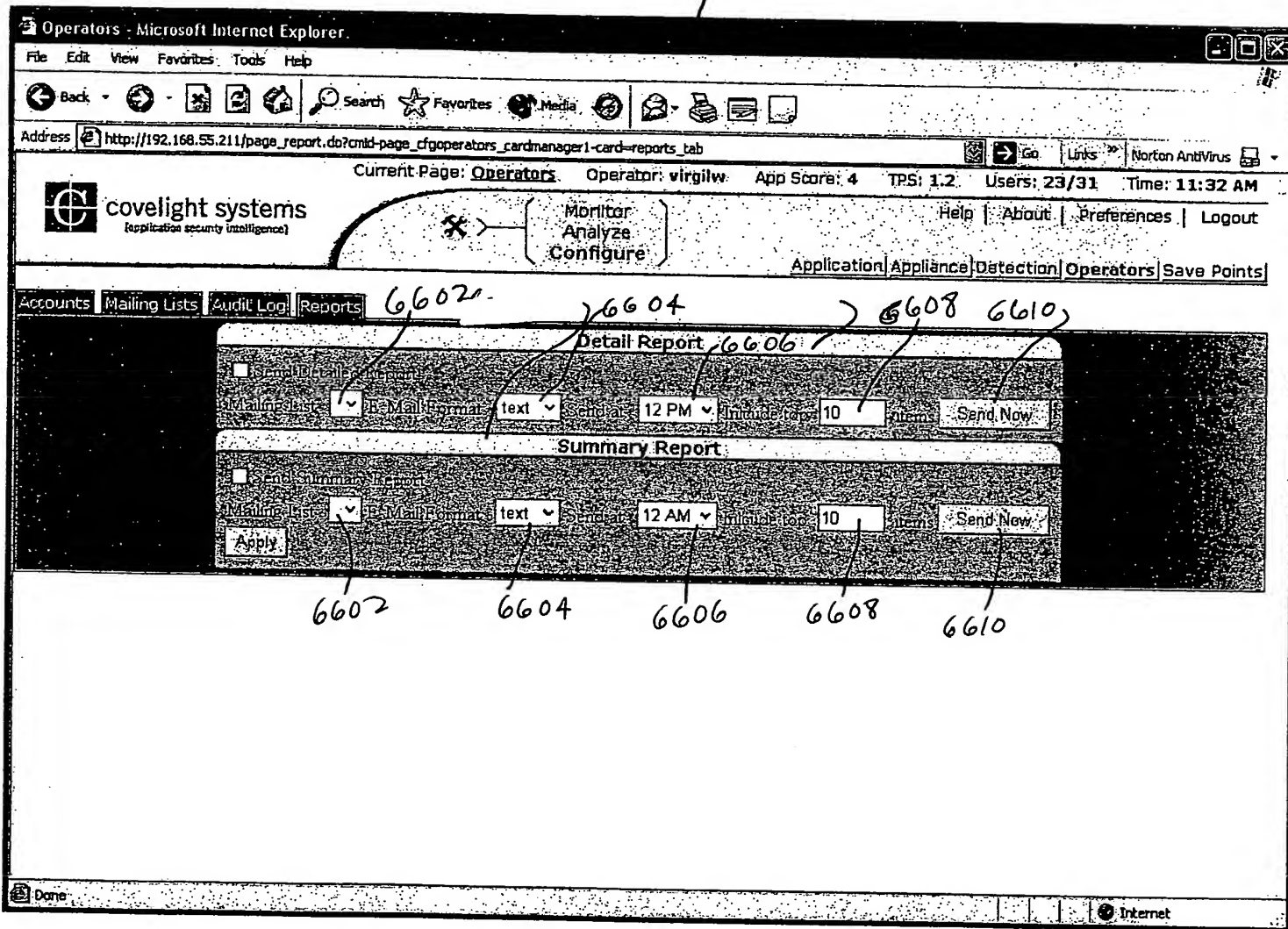


FIG. 67

6700

Detection - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media

Address http://192.168.55.211/main.do?page=page_cfgdetection

Current Page: Detection Operator: virgilw App Score: 3 TPS: 0.1 Users: 20/31 Time: 11:02 AM

covelight systems [application security intelligence]

Monitor Analyze Configure

Help About Preferences Logout

Application Appliance Detection Operators Save Points

Detectors Global Scoring Adjustment Access Lists

Showing 1-13 of 43

Name	Category	Score	Status
Abnormal node error rate	Application Errors	10	Working
Abnormal session duration	Application Misuse	10	Learning
Abnormal user session duration	Application Misuse	10	Working
Application request rate too high	Usage Policy	70	Working
Consecutive login failures	Authentication	30	Working
Disallowed IP address	Access Policy	10	Disabled
Encoded 8-bit character	URL Encoding	5	Working
Excessive individual HTTP errors	HTTP Protocol	40	Working
Excessive login failures	Authentication	10	Learning
Excessive total HTTP errors	HTTP Protocol	40	Working
Flagged user login	Access Policy	50	Working
HTTP buffer overflow	HTTP Protocol	80	Working
HTTP parsing error	HTTP Protocol	80	Working
Invalid % character	URL Encoding	50	Working
Invalid HTTP request	HTTP Protocol	80	Working
Invalid URL encoding	URL Encoding	80	Working
Invalid UTF-8 sequence	URL Encoding	20	Working
Invalid use of %%	URL Encoding	60	Working

6702 6704 6706 6708

Internet

FIG. 68

6800

Detector Detail - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print

Address http://192.168.55.211/page_detectors.do?rowlink=rate1%5C18&tableIndex=38&table=page_detectors_detectorTable Go Links Norton AntiVirus

Current Page: **Detection / Detector Detail** Operator: virgilw App Score: 4 TPS: 0.4 Users: 23/31 Time: 11:37 AM

covelight systems
(application security intelligence)

Monitor Analyze Configure

Help | About | Preferences | Logout

Application | Appliance | **Detection** | Operators | Save Points

Detector Detail <Previous 4/43 Next>

Name: Application throughput too high

Category: Network

Description: Detects when the overall rate of HTTP requests to the application is too high. The sensor takes samples of the transaction-per-second (TPS) throughput of the monitored application. When the value is higher than expected, it might suggest that an attack is progress or that

Enabled: ☒

Event Link: Application throughput (TPS) is too high

Threshold: 70

E-mail Alerts

Send E-mail Alerts: ☐ (No e-mail alerts are desired)

Event Count Limit: 1

Destination List: ☒

Detector Tuning

Throughput Limit: 1000

Transactions per second: 1000

TPS: 0.4

Apply

Done Internet

6802

6804

6806

6808

6810

6812

6900

Detection - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media Mail Print

Address http://192.168.55.211/page_timescore.do?cmd=page_cfgdetection_cardmanager1-card-timescoring_tab Go Links Norton AntiVirus

Current Page: **Detection** Operator: virgilw App Score: 4 TPS: 2.6 Users: 23/31 Time: 11:29 AM

covelight systems
[application security intelligence]

Monitor Analyze Configure

Help | About | Preferences | Logout

Application | Appliance | **Detection** | Operators | Save Points

Detectors | Global Scoring Adjustment | Access Lists

Global Scoring Adjustment

From Day	From Hour	To Day	To Hour	Score Adjustment	Comment
<input type="checkbox"/> Monday	8 AM	Monday	8 PM	60%	Normal working hours - Monday
<input type="checkbox"/> Friday	9 PM	Sunday	7 AM	600%	No one should be working during these hours - dmd

Delete From: Friday 6 PM To: Sunday 8 AM Adjustment %: 100 Comment:

Add Adjustment

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7000

7006

7008

FIG. 71

7100

The screenshot displays a web application interface for 'covelight systems' (Application security intelligence). The interface is divided into several sections:

- Top Bar:** Includes 'Access List Detail', 'Microsoft Internet Explorer', and navigation links like 'File', 'Edit', 'View', 'Favorites', 'Tools', 'Help'.
- Search Bar:** Contains a search engine (Google) and a search button.
- Current Page:** Shows 'Detection / detail_uai' with 'Operator: admin' and 'App Score: 0'. It also displays 'TPS: 0' and 'Users: 0/12772'.
- Navigation Menu:** Includes 'Help', 'About', 'Preferences', 'Logout', 'Application', 'Appliance', 'Detection', 'Operators', 'Save Points'.
- Main Content Area:**
 - Access List Detail:** A table with columns for 'User', 'IP Address', and 'Pattern'. It shows a single entry for 'test' with IP '192.168.55.*'.
 - Users:** A section for managing users, including 'Add User', 'Delete', and 'Add Pattern'.
 - Disabled Detectors:** A section for managing disabled detectors, including 'Add Detector', 'Delete', and 'Abnormal node error rate'.
 - Scoring Adjustment:** A section for adjusting scoring, including 'From Day', 'From Hour', 'To Day', 'To Hour', 'Score Adjustment', and 'Add Adjustment'.
- Bottom Bar:** Includes a 'Done' button and a status bar.

Handwritten annotations with leader lines point to various elements:

- 7100 points to the top bar area.
- 7102 points to the 'Access List Detail' table.
- 7110 points to the 'Users' section.
- 7114 points to the 'Disabled Detectors' section.
- 7120 points to the 'Add Detector' button.
- 7126 points to the 'Abnormal node error rate' checkbox.
- 7104 points to the 'IP Address' column header.
- 7118 points to the 'Add Pattern' button.
- 7108 points to the 'Add Pattern' button.
- 7136 points to the 'Add Adjustment' button.
- 7132 points to the 'Add Adjustment' button.
- 7130 points to the 'Add Adjustment' button.
- 7138 points to the 'Add Adjustment' button.
- 7140 points to the 'Add Adjustment' button.